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Summary of Precision and Accuracy Assessments for the State and Local Air Monitoring Networks, 1981

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Research Triangle Park, NC

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SUMMARY OF PRECISION AND ACCURACY ASSESSMENTS FOR THE STATE AND LOCAL AIR MONITORING NETWORKS
1981

by

E. Gardner Evans
Data Management and Analysis Division
Environmental Monitoring Systems Laboratory
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

Raymond C. Rhodes
Quality Assurance Division
Environmental Monitoring Systems Laboratory
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

U.S. Environmental Protection Agency
Office of Research and Development
Environmental Monitoring Systems Laboratory
Research Triangle Park, N.C. 2711

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Ambient air quality data collected by states and local agencies are used in planning the nation's air pollution control strategy, in determining if National Air Quality Standards are being achieved, and in determining long-term trends of air quality. Prior to the regulations of May 10, 1979, the procedures used in site selection, controlling equipment, and calculating and validating data varied considerably among agencies. To alleviate this problem the May 10, 1979, regulations imposed uniformity on the data collected and required precision and accuracy to be reported.

This report covers the first year of collecting for precision and accuracy data from state and local monitoring agencies. The data are summarized first by state and pollutant, and then summarized by region and the nation.

A brief comparison of the precision and accuracy from the Precision and Accuracy Reporting System and that from the independent performance audit program conducted by the Environmental Monitoring Systems Laboratory is presented.

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FOREWORD

Measurement and monitoring research efforts are designed to anticipate potential environmental problems, to support regulatory actions by developing an in-depth understanding of the nature and processes that impact health and the ecology, to provide innovative means of monitoring compliance with regulations, and to evaluate the effectiveness of health and environmental protection efforts through the monitoring of long-term trends. The Environmental Monitoring Systems Laboratory, Research Triangle Park, North Carolina, has the responsibility for assessment of environmental monitoring technology and systems; implementation of agency-wide quality assurance programs for air pollution measurement systems; and supplying technical support to other groups in the Agency including the Office of Air, Noise, and Radiation, the Office of Toxic Substances, and the Office of Enforcement.

Ambient air quality data collected by states and local agencies are used in planning the nation's air pollution control strategy, in determining if National Air Quality Standards are being achieved, and in determining long-term trends of air quality. Prior to the regulations of May 10, 1979, the procedures used in site selection, controlling equipment, and calculating and validating data varied considerably among agencies. To alleviate this problem the May 10, 1979, regulations imposed uniformity [illegible] the data collected and required precision and accuracy to be reported. This report discusses the first year of precision and accuracy.

Thomas R. Hauser, Ph.D.
Director
Environmental Monitoring Systems Laboratory
Research Triangle Park, North Carolina

ABSTRACT

This report covers the first year of collecting for precision and accuracy data from state and local monitoring agencies. The data are summarized first by state and pollutant, and then summarized by region and the nation.

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SECTION 1

INTRODUCTION

The purpose of this document is to report the first year of data from the Precision and Accuracy Reporting System (PARS). Federal regulations promulgated on May 10, 1979, required quality assurance precision and accuracy (P&A)* data to be collected. Collection started January 1, 1981, according to guidelines set forth in 40 CFR Part 58 (44FR27558-27604). These guidelines provide for more uniform Quality Assurance programs and reporting requirements across all state and local air monitoring stations.

The bulk of the material presented in this report results from the considerable efforts of the state and local agencies to produce and report the data quality assessments for P&A.

Comparisons have been made of the accuracy data collected for PARS with the results of the Performance Audit (PA) Program which has been an ongoing program conducted by the Environmental Monitoring Systems Laboratory (EMSL) since the early 1970's.

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*When one speaks of precision and accuracy of measurement data,[1] one really means the precision and accuracy of the measurement process from which the measurement data are obtained. Precision is a measure of the "repeatability of the measurement process under specified conditions." Accuracy is a measure of "closeness to the truth."

SECTION 2

RESULTS

The first year of data collected by State and Local Agencies for P&A has been compiled and summarized. Table 1 displays the P&A percent data capture for 1981. One hundred percent of the reporting organizations required to report P&A data for particulate matter (TSP) reported at least one quarter of data. The overall percent data capture for required P&A on particulate matter was 94%. The overall percentage for all pollutants are listed in Table 1 in the row labeled "Nation."

TABLE 1. NATIONAL AND REGIONAL PERCENT DATA CAPTURE FOR REQUIRED PRECISION AND ACCURACY

	Automated Methods (%)				Manual Method (%)
Region	CO	SO_2	NO_2	O_3	TSP
01	79	84	50	70	99
02	88	92	69	100	100
03	93	84	84	89	93
04	82	85	31	85	99
05	68	84	54	84	96
06	63	80	56	87	91
07	33	34	28	53	67
08	75	70	75	83	98
09	78	70	48	78	95
10	100	100	63	91	90
Nation	77	82	56	83	94

Of course, some problems did arise, simply because this was the first year of data collection. Typical start-up problems were: following instructions correctly, using the proper form, coding the proper numbers into the correct fields, mailing the results to the right place and getting appropriate personnel resources and training. Through the efforts of EMSL's Quality Assurance Division (QAD), the regional quality assurance offices, and the state and local agencies, the P&A data have been reviewed and verified for completeness and accuracy.

All data summaries presented in this report were based on all of the data received from the state and local agencies; no outliers were removed from the data set. An evaluation of removal of outliers from the PARS data set did not indicate significant changes in the data summary average values.

The P&A numbers for particulate data from the high volume sampler are impressive. From 13,248 valid collocated data pairs, the national average of lower and upper probability limits for precision are -12% and +13%. The accuracy probability limits calculated from 5,560 audits are even more impressive with lower and upper probability limits of -06% and +07%.

RESULTS FROM THE PARS PROGRAM

Table 2 exhibits the national averages for each of the manual pollutant methods in the PARS system.

The precision limits reflect the repeatability of the methodology used in the field to collect and analyze the samples at ambient levels. The spread of the limits may be somewhat inflated due to measurements at relatively low concentration levels.

The accuracy of the manual methods indicates the limits at predetermined concentration levels for the chemical analysis performed in the samples for lead, sulfur dioxide, and nitrogen dioxide. For the particulate matter, the accuracy measurement is for the flow rate only. The probability limits for manual accuracy are extremely good and reflect the quality of work done in the chemical laboratories for lead, sulfur dioxide, and nitrogen dioxide analyses, and in the field for flow rate measurement for particulate matter.

TABLE 2. NATIONAL PRECISION AND ACCURACY PROBABILITY LIMIT AVERAGES FOR MANUAL METHODS

	Precision			Accuracy						
	Number of Valid Collocated Data Pairs	Probability Limits (%)		No. of Audits	Probability Limits (%)					
					Level 1		Level 2		Level 3	
Pollutant		Lower	Upper		Lower	Upper	Lower	Upper	Lower	Upper
TSP	13,248	-12	+13	5,560	—	—	-06	+07	—	—
Lead	416	-25	+30	577	-11	+08	-09	+02	—	—
Sulfur Dioxide	965	-51	+57	711	-16	+09	-09	+07	-08	+06
Nitrogen Dioxide	752	-41	+44	769	-07	+10	-04	+06	-04	+05

The precision and accuracy limits for automated methods are in general good for the first year of operation of the precision and accuracy data collection. Table 3 indicates the amount of effort involved, with over 10,000 precision checks each being performed for SO_2 and O_3 instruments.

TABLE 3. NATIONAL PRECISION AND ACCURACY PROBABILITY LIMIT AVERAGES FOR AUTOMATED ANALYZERS

	Precision			Accuracy						
	No. of Precision Checks	Probability Limits (%)		No. of Audits	Probability Limits (%)					
					Level 1		Level 2		Level 3	
		Lower	Upper		Lower	Upper	Lower	Upper	Lower	Upper
SO_2	10,821	-15	+09	1,062	-17	+13	-13	+11	-13	+11
O_3	10,399	-12	+10	1,336	-14	+12	-10	+09	-10	+09
CO	7,996	-10	+08	821	-13	+13	-07	+08	-07	+06
NO_2	2,487	-14	+12	329	-21	+26	-12	+11	-10	+08

Although the results are good for the first year, further improvement is believed possible. Details of the individual states' results are presented in the body of the following detailed report and from the graphs. The EPA Regions for which further improvement should be possible are those showing greater variability in the results.

COMPARISON OF RESULTS FROM THE PARS AND THE PERFORMANCE AUDIT PROGRAM

A general comparison between the accuracy data of the PARS program and the PA data is included in this report. The audit data are the results of an independent check conducted by the QAD[2,3] of the EMSL. Blind samples are sent to the laboratories which perform the state and local agencies' analyses. The samples are analyzed and results are sent to QAD where they are evaluated.

Since precision assessments are not made in the PA program, only accuracy can be compared across the PARS and the PA programs. For the purpose of this report, the results from PARS and the PA system are compared at approximately the same levels[4] by matching laboratories and reporting organizations. Since the PARS data are presented with outliers, the same approach was taken with the audit data. Knowledge of the historical audit data reports, however, indicates that the presence of outliers may make a significant difference in the average audit results for the PA.

Future reports which compare PA and PARS are planned. Those reports will address the comparison in more detail, making a laboratory-to-reporting organization comparison with and without the inclusion of outliers.

Comparisons of the national averages of the probability limits exhibit good correlations between the results of the two programs. However, in general, the spread of the limits is wider at level 1 than at levels 2, 3, and 4. Lack of better agreement results from a number of factors. First, the inclusion of outlier values in the performance audit data appears to have introduced some excessive distortion of general trends. Second, even though the PARS averages in Table 4 are weighted by the number of audits, variations due to many sources of error for both data sets are averaged together to obtain the national averages, thereby masking any correlations which may have existed for the results of individual agencies. Third, the concentration levels for the two systems do not coincide exactly at each of the audit levels. Fourth, the PA data are the results of independent external audits, while the PARS accuracy data are based on the results of independent internal audits. The expected effects of the first and last-mentioned factors may cause the spread of the limits for the PA to be wider than that for the P&A. Examination of the results, shown in Table 3, confirm these expectations.

TABLE 4. SUMMARY REPORT OF QAD PERFORMANCE AUDITS (PA) VS. PARS ACCURACY AUDIT DATA FOR YEAR 1981

Pollutant & Code	Audits	National Averages Probability Limits (%)							
		Level 1		Level 2		Level 3		Level 4	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
C42101 CO									
PA	1118	−14	+10	− 8	+ 8	− 7	+ 7		
PARS	(666)	(−18)	(+19)	(− 8)	(+ 9)	(− 8)	(+ 8)	(−30)	(+15)
C42401 SO_2									
PA	389	−27	+22	−21	+15	−18	+12	−18	+15
PARS	(668)	(−20)	(+17)	(−16)	(+15)	(−16)	(+15)	(−13)	(+ 9)
I42602 NO_2									
PA	234	−29	+23	−12	+ 8	−13	+ 8	−11	+ 7
PARS	(716)	(− 9)	(+12)	(− 6)	(+ 7)	(− 5)	(+ 6)		
I42401 SO_2									
PA	157	−44	+28	−30	+20	−16	+10	−20	+12
PARS	(640)	(−22)	(+15)	(−17)	(+13)	(−14)	(+12)		
I12128 LEAD									
PA	84	−25	+19	−15	+11	−15	+10		
PARS	(535)	(−12)	(+ 8)	(− 7)	(+ 5)				
I111101 TSP									
PA	2114			−18	+19				
PARS	(3073)			(−10)	(+10)				

Later data tables list the reporting organization by laboratory comparisons.

SECTION 3

BACKGROUND

Ambient air quality data, collected by states and local agencies, have been stored in the National Aerometric Data Bank (NADB) since 1957. These data are used in planning the nation's air pollution control strategy, in determining if the National Air Quality Standards are being achieved, and in determining long-term trends of air quality. Prior to the air monitoring regulations of May 10, 1979, the procedures used in selecting monitoring sites, operating and controlling the equipment, and calculating, validating and reporting the data varied considerably among agencies. Frequently the procedures being used were not well-documented. This made it difficult to intercompare data from different sites and agencies.

To help alleviate this problem, EPA promulgated a regulation on May 10, 1979, that imposed uniformity on air monitoring data collected after December 30, 1980, and intended to be submitted to the NADB. For example, only EPA reference, equivalent or other EPA-approved air monitoring methods were to be used. Also, calibration standards were to be traceable to the National Bureau of Standards (NBS) or other authoritative standards. Further, the quality assurance systems of the states were required to be documented and approved by the EPA Regional Offices. Finally, the reporting organizations must also follow specific procedures when assessing the P&A of their measurement systems and must report the P&A data quarterly to EPA.

The precision assessments were generally determined either by performing repeated measurements on approximately ambient-level "calibration" gases at two-week intervals, or by obtaining duplicate results from collocated samplers. The accuracy assessments were generally determined by analyzing blind audit materials traceable to NBS. During each calendar year, each site or instrument must be audited at least once. Details concerning the specific procedures and computations used to assess P&A are contained in the regulations.[4]

When a request is made for ambient air quality monitoring data, from the NADB, the requestor receives the P&A data along with the routine monitoring data. The requestor, or user, of the data can feel more confident that the data are of the quality indicated by the assessments and that the data have been obtained from an agency having a planned and documented quality assurance system. The EPA can also rely on the data in producing its control strategies and determining whether standards have been met.

REGULATIONS

The regulations are found in the May 10, 1979, Federal Register with corrections in the November 9 and December 14, 1979, Federal Registers. For the purpose of this report, they are briefly summarized. For details of methods and calculations, please refer to regulations.[4]

The regulations require that measures of data quality, i.e., P&A be reported on the basis of reporting organizations. A reporting organization is defined as a state or subordinate organization within a state that is responsible for a set of stations which monitor the same pollutant for which P&A logically can be pooled. The set of monitoring stations are distinct for each pollutant, although a particular station may report to a particular reporting organization for more than one pollutant. Also, it is possible (but unlikely) that a given sampling site may be identified with different reporting organizations for different pollutants. Therefore, it is important to emphasize that a reporting organization is pollutant and site-specific, and is responsible for the total operational system involved in sampling, calibration, analysis, and reporting for routine monitoring for a specific pollutant.

The P&A determinations are made by the performance of specified internal checks made by the reporting organizations for SLAMS. The responsibility for the performance and reporting of the P&A data rests with the reporting organizations and is, therefore, considered as internal to the reporting organizations.

Closely related to the internal checks for accuracy are the external performance audits[3] conducted by EPA. Under the May 10, 1979 regulation, all agencies operating SLAMS sites must participate in the EPA national PA program.

MANUAL METHODS

Precision for each of the manual methods (except for Pb) is determined from the results of collocated samplers located at two sites where high concentrations are expected. The P&A checks for Pb are made from the results of duplicate strips of filters from a single site of expected high Pb results.

Accuracy is determined from the results of local, independent audits for the flow or analytical measurement portion of the methods. The accuracy checks are essentially internal, but independent, checks on the local routine calibration process.

AUTOMATED ANALYZERS

Precision of each of the automated analyzers is determined from the results of biweekly precision checks. The precision checks are actually measurements of the analyzer response at a concentration level near the national air quality standards for the pollutant being checked.

Accuracy is determined from the results of local audits using independently prepared standards.

SECTION 4

ANALYSIS

For the year 1981, which was the first year data for P&A were required by regulation, a total of 141 reporting organizations reported TSP P&A data. According to the regulation, required reporting will be phased in for all approved sites of the SLAMS network on January 1, 1983. Table 5 lists the totals for each pollutant for the year 1981. For some of the pollutants, the number of reporting organizations will increase in 1982 and 1983.

TABLE 5. NUMBER OF REPORTING ORGANIZATIONS WITH DATA IN PARS MASTER FILE FOR EACH POLLUTANT FOR THE YEAR 1981

	Automated Methods				Manual Methods			
Region	CO C42101	SO_2 C42401	NO_2 C42602	O_3 044201	TSP I11101	PB I12128	SO_2 I42401	NO_2 I41602
01	3	6	2	5	6	1	0	0
02	3	3	2	3	3	0	0	0
03	10	12	13	13	17	1	1	1
04	31	32	9	26	34	21	24	28
05	17	27	7	13	22	5	4	4
06	11	11	2	9	14	1	4	4
07	10	7	7	7	11	1	1	1
08	4	5	2	2	9	1	0	0
09	10	7	7	7	10	2	2	1
10	3	3	1	2	4	2	1	1
Nation	102	113	82	118	141	35	37	40

Because of the volume of raw data, the data tables in this report are organized to display data on a by-state or by-EPA region basis.

The data reports by the reporting organizations are coded on the data assessment report form, Figures A-1, shown in the Appendix. Also, the detailed description definitions for the form are given in the Appendix.

The data, once received by EMSL, is processed into the PARS where, once a quarter, data are summarized and returned to the Regional Offices. On an annual basis, a report for the preceding year is compiled by EMSL. This report is the first in the series.

DATA ANALYSIS

To briefly summarize the P&A assessments on a Regional basis, Figures 1 through 8 show the relationship by pollutant for each region to the national average. The regional averages of the upper and lower probability limits are presented. The results from individual states or reporting organizations within the regions may be considerably better or worse than indicated by the regional averages. The individual states results are displayed in Table 6.

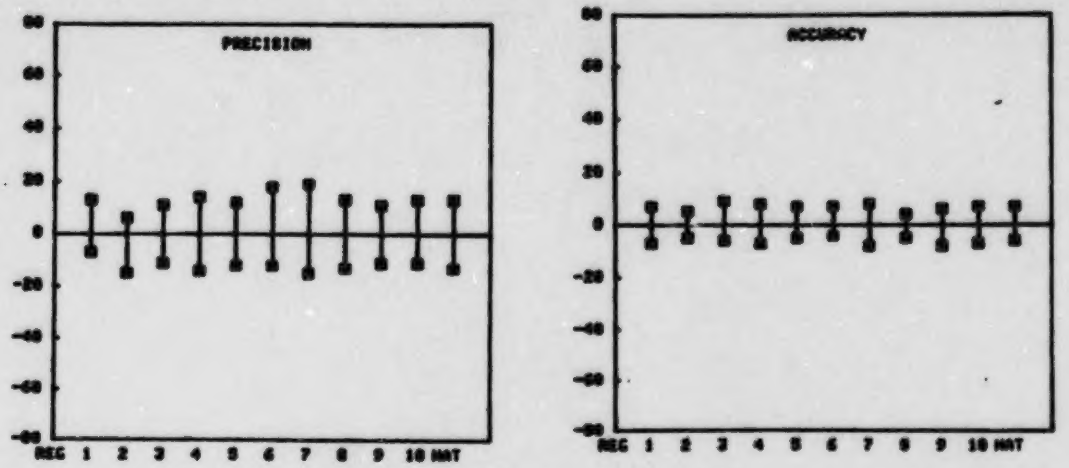

Figure 1. Range of regional P&A probability limits around national average for TSP (manual methods).

Figure 1 shows the P&A for particulate matter. The plots show Region VII with the widest range of limits for both precision and accuracy. The accuracy audit results are better than the corresponding precision results. This may be partly due to the fact that the accuracy audit results are checks on only the flow measurement for the method, whereas the precision results involve the total method.

Only seven regions (35 reporting organizations) submitted lead P&A data. The precision from different strips from the same filter varied widely, with Region VII showing the smallest range and Region IX having the largest differences (Figure 2).

The probability limits for accuracy checks from Region VII are considerably wider than those from the other regions. As with the particulate data, the accuracy results are less variable than the precision results.

Figures 3 and 4 represent manual SO_2 and NO_2 methods. As indicated previously in Table 4, very little reporting was received from regions other than IV, V, and VI. The precision exhibits wide ranges for both SO_2 and NO_2 indicating poor collection methodology. The accuracy results indicate quality laboratory analyses.

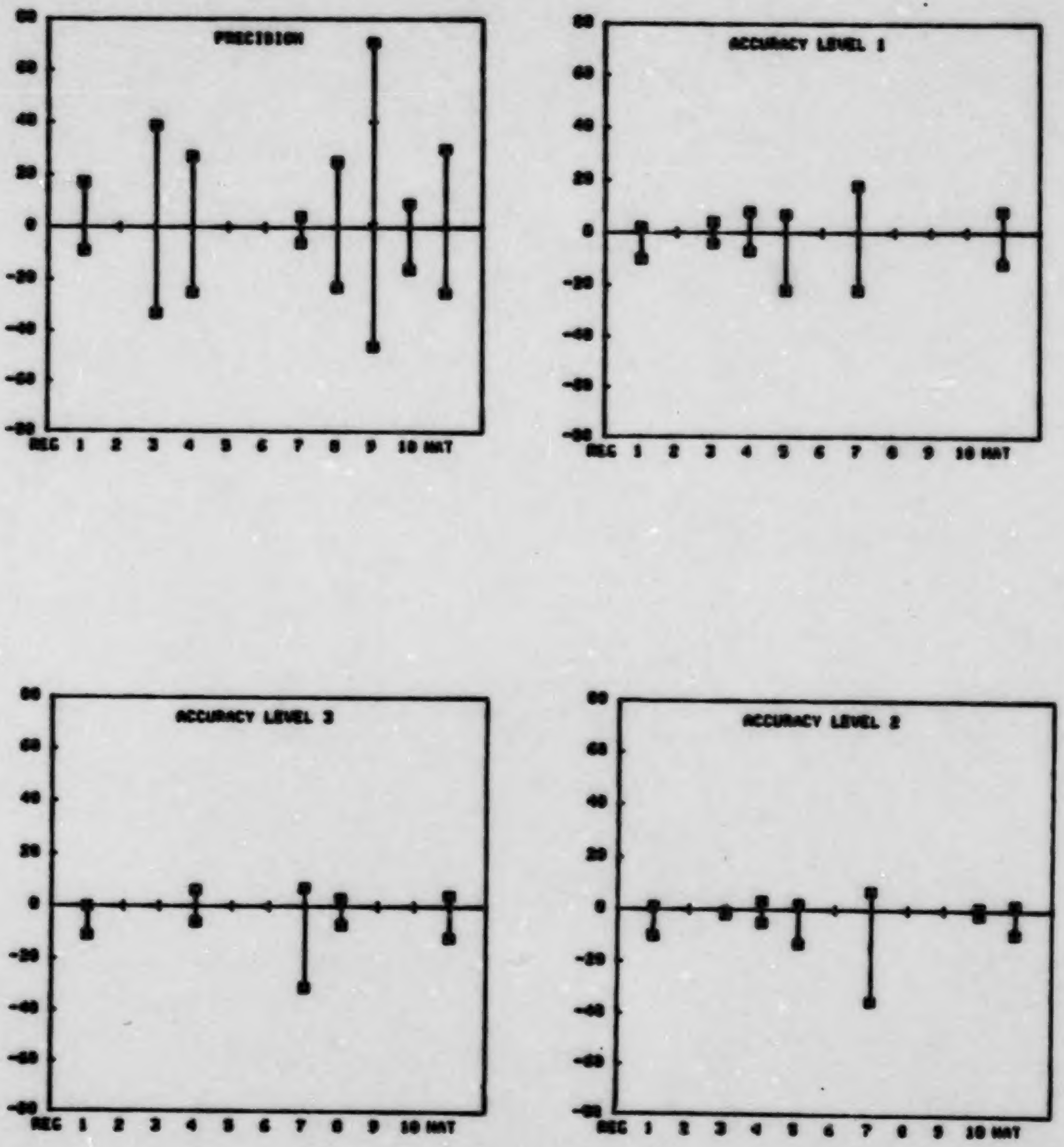

Figure 2. Range of regional P&A probability limits around national average for lead (manual methods).

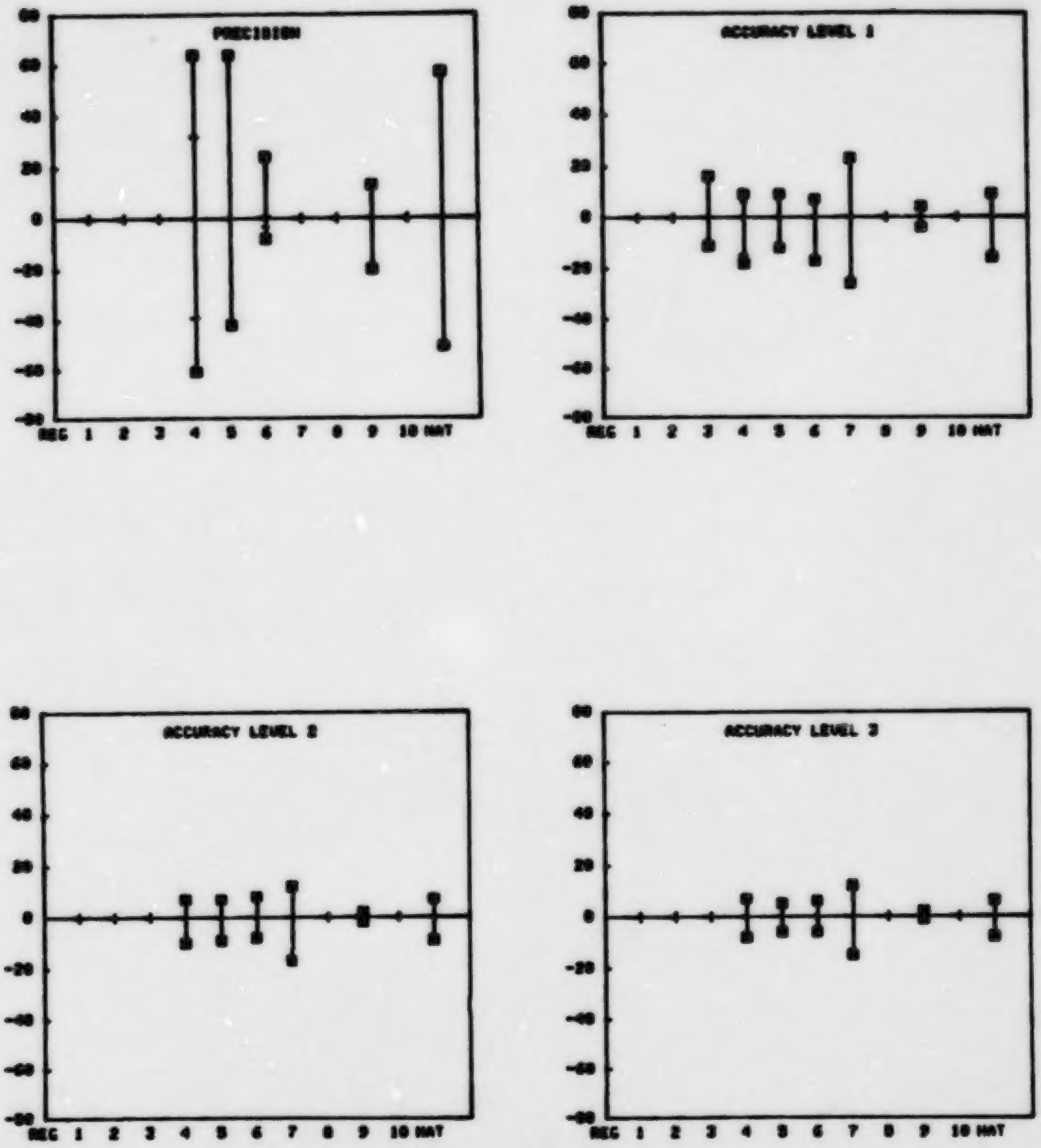

Figure 3. Range of regional P&A probability limits around national averages for SO_2 (manual methods).

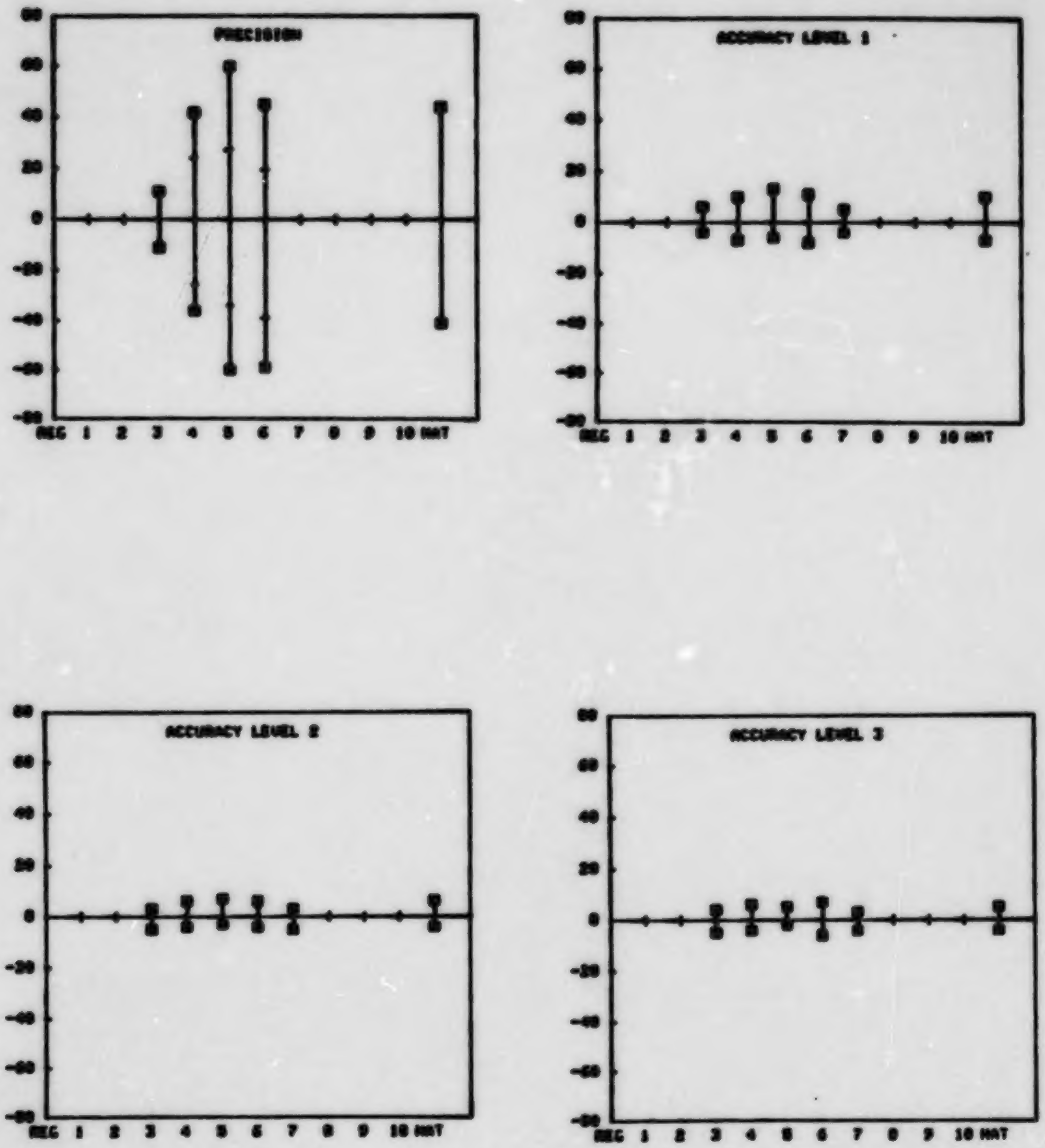

Figure 4. Range of regional P&A probability limits around national average for NO_2 (manual methods).

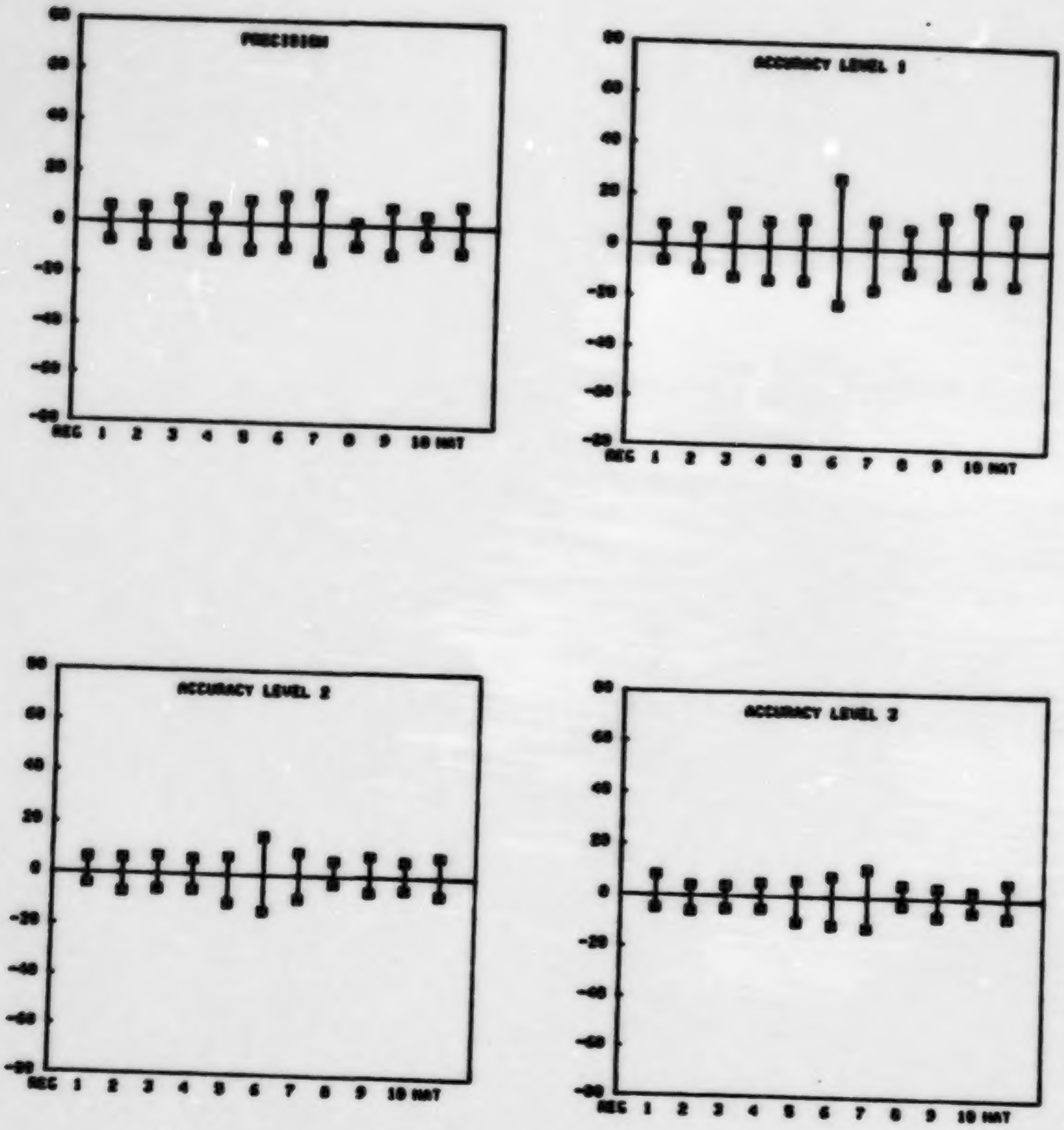

Figure 5. Range of regional P&A probability limits around national average for CO (continuous method).

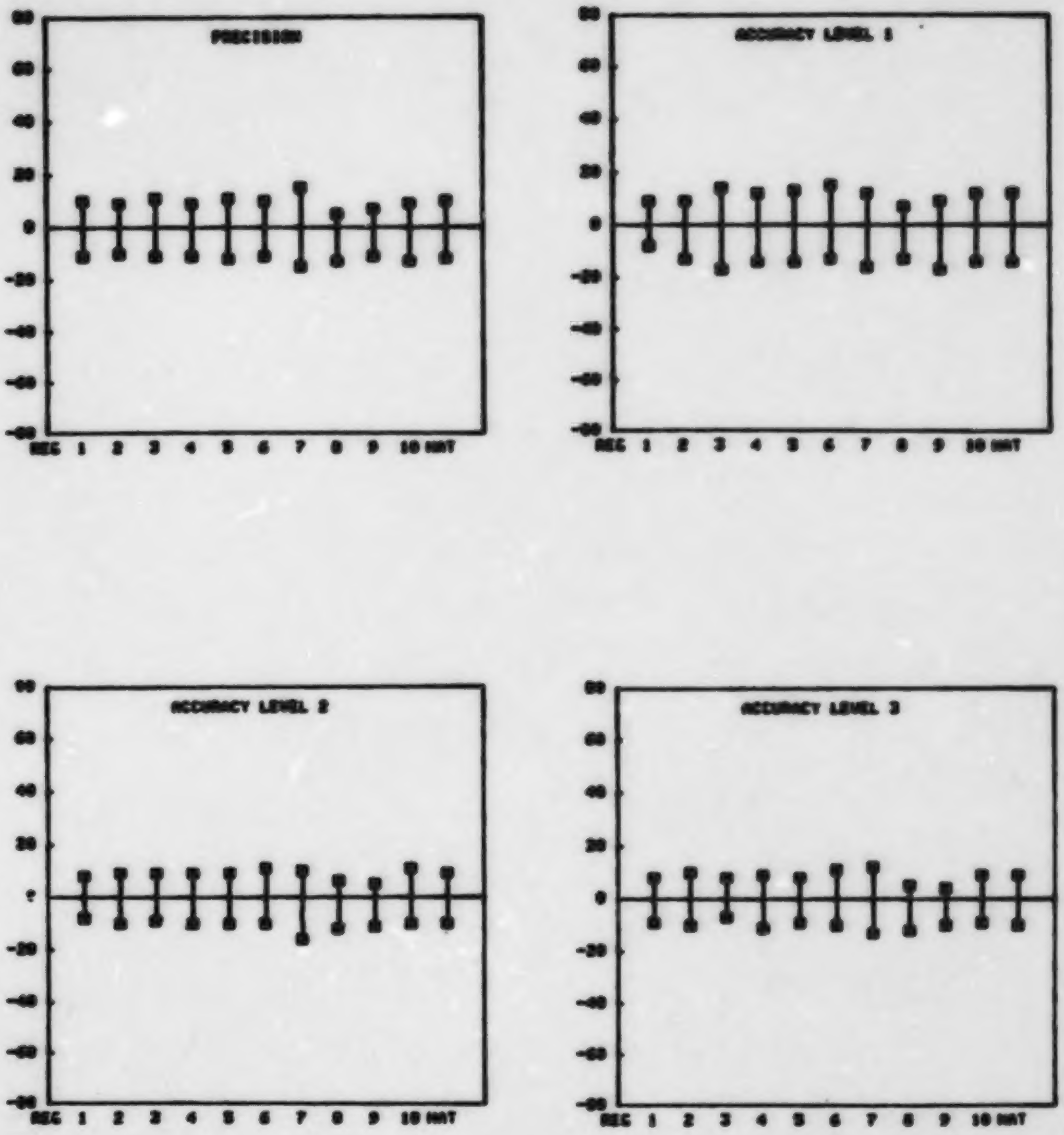

Figure 6. Range of regional P&A probability limits around national average for O_3 (continuous method).

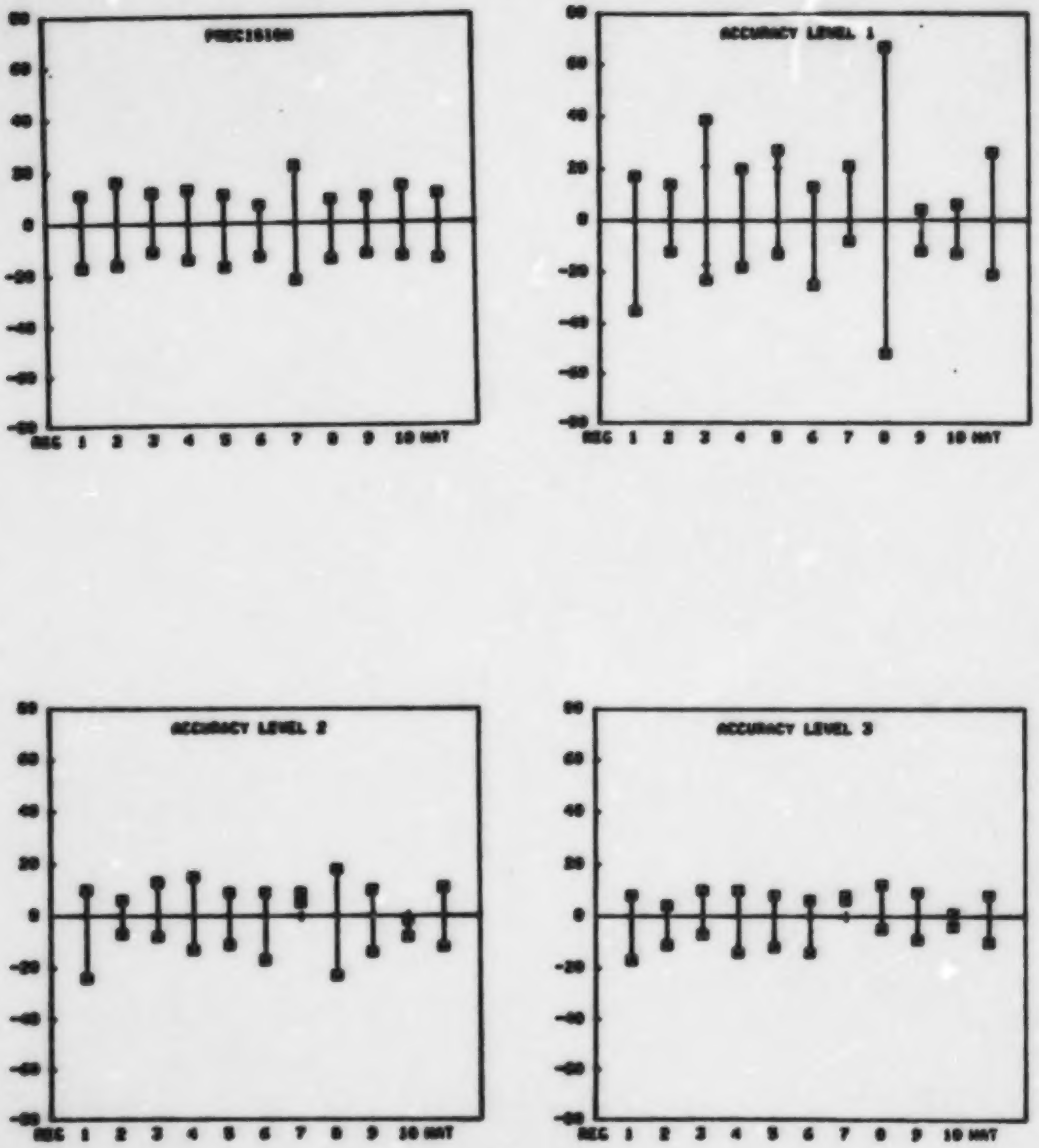

Figure 7. Range of regional P&A probability limits around national average for NO_2 (continuous method).

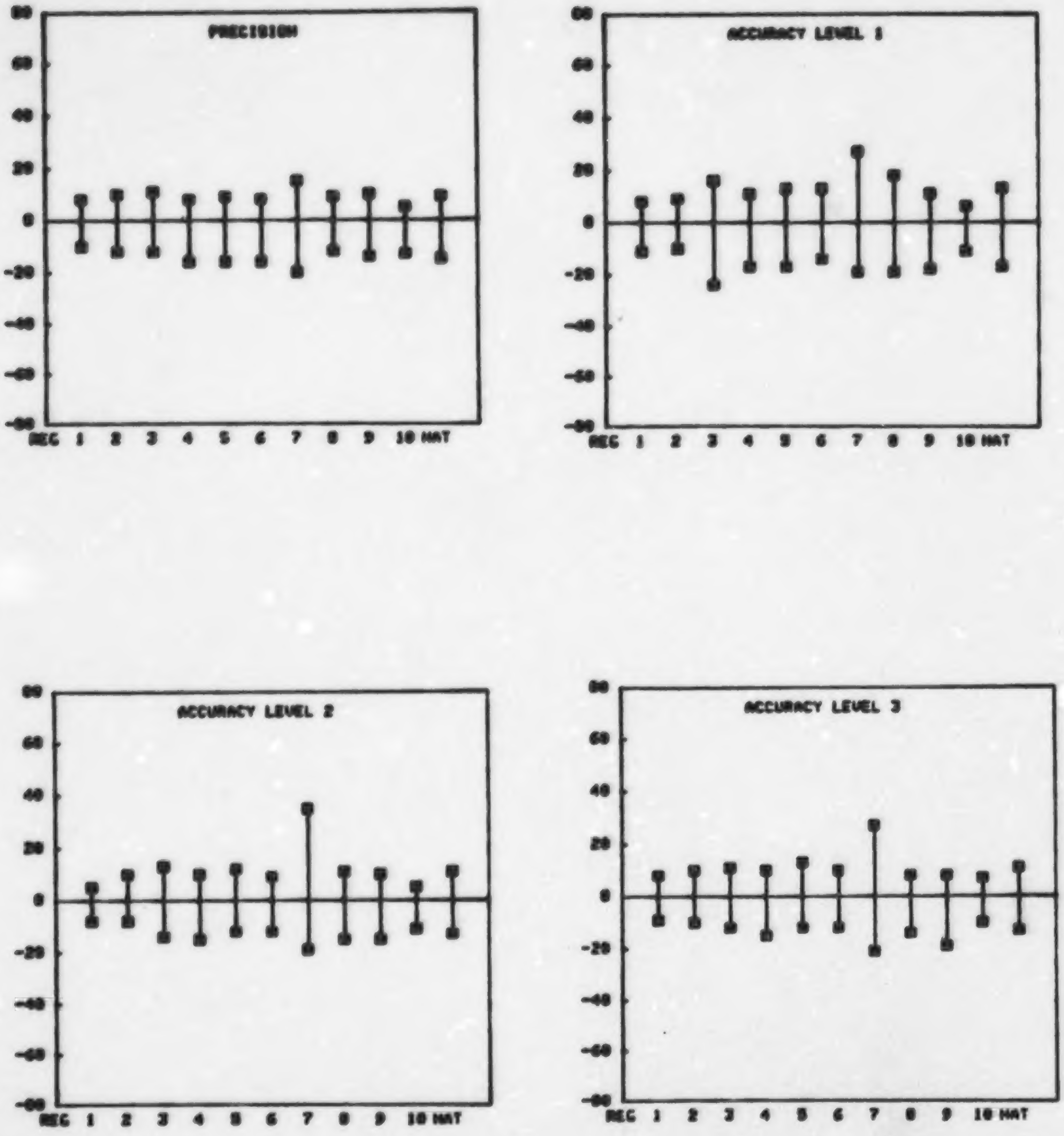

Figure 8. Range of regional P&A probability limits around national average for SO_2 (continuous method).

It should be noted on Figures 1 through 4, for the precision of the manual methods, that two sets of limits may be shown - one including gross outlier values exceeding 99%, and the second set with these outlier values omitted. Deletion of the excessive value in many cases drastically reduced the limits. The excessive percentage values for precision usually occurred when the pollutant levels were quite low. Proposed changes to the regulations are being made to restrict the computation of precision to cases where the pollutant levels are more appreciable. Implementation of these changes should eliminate the erratic behavior of the precision results and at the same time make the assessments much more meaningful.

The summary results for carbon monoxide are shown in Figure 5. For precision, Region VII has the widest range in differences with -14 to +12, and Region X has the smallest range with -07 to +4. The national average is -10 and +8. For carbon monoxide accuracy levels, the general trend of less variability at the higher levels holds true.

Figures 6, 7, and 8 depict the precision and accuracy results for continuous ozone, nitrogen dioxide, and sulfur dioxide. All exhibit similar trends for precision and the different accuracy levels.

In summary, Figures 1 through 8 reveal some significant differences when comparing the averages for the different regions. These should be noted by Regional Quality Assurance Officers and appropriate investigations initiated to determine the causes. Necessary corrective actions should be taken to preclude the use of any improper procedure or calculation. Possibly more important, however, may be differences found from one state to another within the same region (or between different reporting organizations within a state). The state-by-state results are included in the detailed tabulations which follow. The tabulations include both the results of the PARS precision and accuracy assessments and the results of the PA program. These results should be reviewed and evaluated by the Regional and State Quality Assurance individuals to determine if any corrective action is necessary.

Table 8 displays the frequency distribution of the upper and lower probability limits across the nation. The distribution is based on the values received from the individual reporting organizations. Table 9 displays the frequency distributions of the means and standard deviation of the limits from the individual reporting organizations. These two tables are provided for an individual reporting organziation to make comparisons of their own data against all other reporting organizations in the nation.

The data tables with the results of the P&A on a state-by-state basis are listed in Table 6.

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TABLE 6. PRECISION AND ACCURACY DATA SUMMARIZED BY STATE

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ENVIRONMENTAL PROTECTION AGENCY          EMSL PRECISION/ACCURACY REPORTING SYSTEM

                         ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES
DATE 01/24/83               DATA SELECTED FOR THE YEAR 1981
PROGRAM PA240                                                    FILE NO. PA240R01
                                     STATE AVERAGES

REGION 01  STATE  07  CONNECTICUT
                                          AUTOMATED ANALYZERS
            ----------PRECISION--------- -----------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
             NO.  PREC.  PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*   2          -09 +05                    -09 +11 -12 +03 -12 +05
(SO2)   TOT     9     50              13

C44201  AVG    7          -13 +11                    -15 +11 -11 +10 -06 +06
(O3)    TOT    22    109              14

                                          MANUAL METHODS
          ------------PRECISION-----------  ----------------ACCURACY--------------
                    NO.  COLL.                           --PROBABILITY LIMITS---
           NO. OF  COLL. SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.   SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG   32     3          -09 +09                          -10 +04
(TSP)   TOT    126    12      8             160       207

    * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES


REGION 01  STATE  20  MAINE
                                          AUTOMATED ANALYZERS
            ----------PRECISION--------- -----------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
             NO.  PREC.  PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG    2          -06 +04                    -05 +07 -03 +10 -04 +11
(SO2)   TOT     8    103               9

C44201  AVG    3          -04 +11                    -04 +09 -07 +09 -07 +10
(O3)    TOT     6     72               9

C42101  AVG    1          -08 +04
(CO)    TOT     3     30

                                          MANUAL METHODS
          ------------PRECISION-----------  ----------------ACCURACY--------------
                    NO.  COLL.                           --PROBABILITY LIMITS---
           NO. OF  COLL. SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.   SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG    1     1          -06 +12                          -09 +07
(TSP)   TOT      4     4                     58        11
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(Continued)

TABLE 6. (Continued)

REGION 01 STATE 22 MASSACHUSETTS

AUTOMATED ANALYZERS

POL.CD.		PRECISION NO. ANAL.	PRECISION PREC. CHECKS	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	PRECISION NO. AUDITS	ACCURACY NO.AUDS LEVEL 4	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG	17		-08	+12			-13	+08	-11	+07	-11	+09		
(SO2)	TOT	69	602			21									
C44201	AVG	11		-16	+11			-18	+12	-15	+11	-15	+14		
(O3)	TOT	45	393			18									
C42101	AVG	6		-07	+09			-07	+10	-08	+10	-08	+12		
(CO)	TOT	22	208			8									
C42602	AVG	3		-20	+14			-22	+22	-24	+20	-09	+19		
(NO2)	TOT	8	48			2									

MANUAL METHODS

POL.CD.		PRECISION NO. OF SAMPLERS	PRECISION NO. COLL. SITES	PRECISION COLL. SAMPS <LIMIT	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	PRECISION NO.VAL. COLL.PRS	ACCURACY NO. AUDITS	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG	25	2		-16	+16					-07	+11		
(TSP)	TOT	101	7				14	48						

REGION 01 STATE 30 NEW HAMPSHIRE

AUTOMATED ANALYZERS

POL.CD.		PRECISION NO. ANAL.	PRECISION PREC. CHECKS	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	PRECISION NO. AUDITS	ACCURACY NO.AUDS LEVEL 4	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG	3		-16	+11			-13	+07	-10	+04	-10	+07		
(SO2)	TOT	13	276			20									
C44201	AVG*	2		-15	+09			-04	+03	-10	+01	-11	+03		
(O3)	TOT	8	169			14									

MANUAL METHODS

POL.CD.		PRECISION NO. OF SAMPLERS	PRECISION NO. COLL. SITES	PRECISION COLL. SAMPS <LIMIT	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	PRECISION NO.VAL. COLL.PRS	ACCURACY NO. AUDITS	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG	10	2		+00	+16					-08	+08		
(TSP)	TOT	38	6				83	22						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

REGION 01 STATE 41 RHODE ISLAND

AUTOMATED ANALYZERS

POL.CD.		PRECISION NO. ANAL.	PRECISION PREC. CHECKS	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	PRECISION NO. AUDITS	ACCURACY NO.AUDS LEVEL 4	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG	4		-12	+08			-10	+11	-05	+08	-05	+12		
(SO2)	TOT	16	414			11									
C44201	AVG	2		-08	+08			-01	+12	-04	+13	-09	+19		
(O3)	TOT	8	199			6									
C42101	AVG*	2		-09	+05			-04	+09	-02	+05	-03	+06		
(CO)	TOT	8	201			10									
C42602	AVG	1		-14	+07			-41	+15	-24	+06	-22	+02		
(NO2)	TOT	3	74			4									

MANUAL METHODS

POL.CD.		PRECISION NO. OF SAMPLERS	PRECISION NO. COLL. SITES	PRECISION COLL. SAMPS <LIMIT	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	PRECISION NO.VAL. COLL.PRS	ACCURACY NO. AUDITS	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG	8	2		-07	+17					-08	+07		
(TSP)	TOT	32	8	2			150	23						
I12128	AVG*	2	1		-09	+17			-10	+02	-10	+01	-11	+00
(PB)	TOT	7	4	1			54	26						

REGION 01 STATE 47 VERMONT

AUTOMATED ANALYZERS

POL.CD.		PRECISION NO. ANAL.	PRECISION PREC. CHECKS	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	PRECISION NO. AUDITS	ACCURACY NO.AUDS LEVEL 4	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG*	5		-09	+07			-12	+00	-09	+00	-16	-01		
(SO2)	TOT	18	156			6									
C44201	AVG	2		-08	+11			-05	+04	-06	-01	-07	-02		
(O3)	TOT	4	40			11									
C42101	AVG	1		-06	+04			-11	+03	-05	+05	-07	+08		
(CO)	TOT	4	418			2									

MANUAL METHODS

POL.CD.		PRECISION NO. OF SAMPLERS	PRECISION NO. COLL. SITES	PRECISION COLL. SAMPS <LIMIT	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	PRECISION NO.VAL. COLL.PRS	ACCURACY NO. AUDITS	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG	6	2		-05	+08					-03	+04		
(TSP)	TOT	25	8	1			88	23						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

```
ENVIRONMENTAL PROTECTION AGENCY           EMSL PRECISION/ACCURACY REPORTING SYSTEM

                     ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES
DATE 01/24/83            DATA SELECTED FOR THE YEAR 1981
PROGRAM PA240                                                    FILE NO. PA240R01
     -                            REGION AVERAGES

REGION  01
                                      AUTOMATED ANALYZERS
            ----------PRECISION--------- -----------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
             NO.  PREC.  PR.LIMS.  NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*   6         -10 +08                   -11 +08 -08 +05 -09 +08
(SO2)   TOT   133 1,601             80

C44201  AVG*   5         -11 +10                   -08 +09 -08 +08 -09 +08
(O3)    TOT    93   982             72

C42101  AVG*   2         -07 +06                   -06 +08 -04 +06 -05 +08
(CO)    TOT    37   857             20

C42602  AVG    2         -17 +11                   -35 +17 -24 +10 -17 +08
(NO2)   TOT    11   122              6

                                       MANUAL METHODS
            -----------PRECISION-----------  ---------------ACCURACY---------------
                     NO.    COLL.                           --PROBABILITY LIMITS---
             NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.     NO. LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.     SAMPLERS SITES  <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG    14      2           -07 +13                          -07 +07
(TSP)   TOT    326      45      11             553       334

I12128  AVG*    2      1           -09 +17                  -10 +02 -10 +01 -11 +00
(PB)    TOT      7      4       1               54        26

     * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 6. (Continued)

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                                        STATE AVERAGES

REGION 02  STATE  31  NEW JERSEY
                                     AUTOMATED ANALYZERS
            -----------PRECISION--------- ------------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.      ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG   7          -17 +16                    -10 +12 -09 +11 -11 +15
(SO2)   TOT   29    217                22

C44201  AVG   5          -13 +14                    -09 +08 -07 +06 -06 +09
(O3)    TOT   18    126                13

C42101  AVG*  2          -10 +10                    -04 +08 -08 +07 -05 +04
(CO)    TOT    8     52                 8

C42602  AVG*  2          -16 +19                    -14 +14 -08 +09 -16 +10
(NO2)   TOT    8     61                 8

                                     MANUAL METHODS
           ------------PRECISION-----------  ---------------ACCURACY---------------
                    NO.    COLL.                                --PROBABILITY LIMITS---
           NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.     NO.   LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW   UP LOW  UP LOW  UP

I11101  AVG*  11      2          -15 +05                            -03 -01
(TSP)   TOT     45      8                   114        10


REGION 02  STATE  33  NEW YORK
                                     AUTOMATED ANALYZERS
            -----------PRECISION--------- ------------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.      ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG   41         -07 +06                    -10 +09 -07 +09 -08 +10
(SO2)   TOT   163   374                84

C44201  AVG   25         -11 +09                    -15 +13 -12 +12 -11 +12
(O3)    TOT   100   150                39

C42101  AVG   22         -06 +04                    -14 +07 -07 +06 -06 +04
(CO)    TOT    88   141                25

C42602  AVG*   4         -15 +11                    -09 +13 -07 +01 -07 -02
(NO2)   TOT    12    30                 5

                                     MANUAL METHODS
           ------------PRECISION-----------  ---------------ACCURACY---------------
                    NO.    COLL.                                --PROBABILITY LIMITS---
           NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.     NO.   LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW   UP LOW  UP LOW  UP

I11101  AVG  214     18          -10 +08                            -06 +08
(TSP)   TOT    857     70                   307        23

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 6. (Continued)

REGION 02 STATE 40 PUERTO RICO

AUTOMATED ANALYZERS

POL.CD.		PRECISION NO. ANAL.	PRECISION PREC. CHECKS	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	ACCURACY NO. AUDITS	ACCURACY NO.AUDS LEVEL 4	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG	6		-11	+08			-09	+05	-09	+10	-11	+07		
(SO2)	TOT	22	218			7									
C44201	AVG*	1		-06	+02			-17	+05	-12	+08	-12	+08		
(O3)	TOT	3	24			6									
C42101	AVG*	1		-12	+03										
(CO)	TOT	4	23												

MANUAL METHODS

POL.CD.		PRECISION NO. OF SAMPLERS	PRECISION NO. COLL. SITES	PRECISION COLL. SAMPS <LIMIT	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	ACCURACY NO.VAL. COLL.PRS	ACCURACY NO. AUDITS	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG	16	2		-21	+05								
(TSP)	TOT	65	8					28			-06	+09		

REGION AVERAGES

REGION 02

AUTOMATED ANALYZERS

POL.CD.		PRECISION NO. ANAL.	PRECISION PREC. CHECKS	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	ACCURACY NO. AUDITS	ACCURACY NO.AUDS LEVEL 4	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG	18		-12	+10										
(SO2)	TOT	214	809			113		-10	+09	-08	+10	-10	+10		
C44201	AVG*	11		-10	+09										
(O3)	TOT	121	300			58		-13	+09	-10	+09	-10	+10		
C42101	AVG*	9		-09	+06										
(CO)	TOT	100	216			33		-09	+07	-07	+06	-06	+04		
C42602	AVG*	3		-16	+16										
(NO2)	TOT	20	91			13		-12	+14	-07	+06	-11	+04		

MANUAL METHODS

POL.CD.		PRECISION NO. OF SAMPLERS	PRECISION NO. COLL. SITES	PRECISION COLL. SAMPS <LIMIT	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	ACCURACY NO.VAL. COLL.PRS	ACCURACY NO. AUDITS	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG*	81	7		-15	+06								
(TSP)	TOT	967	86				421	61			-05	+05		

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

STATE AVERAGES

REGION 03 STATE 08 DELAWARE

AUTOMATED ANALYZERS

POL.CD.		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
		NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	PR.LIMS. UP	NO. AUDITS	NO.AUDS LEVEL 4	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG	8		-17	+20			-24	+06	-13	+21	-07	+22		
(SO2)	TOT	31	127			10									
C44201	AVG	3		-12	+14			+03	+10	+07	+12	+08	+14		
(O3)	TOT	11	44			1									
C42101	AVG	2		-07	+17			-13	+07	-14	+13	-10	+06		
(CO)	TOT	8	43			5									
C42602	AVG	1		-03	+15			+03	+04	+02	+03	+01	+02		
(NO2)	TOT	4	16			1									

MANUAL METHODS

POL.CD.		PRECISION					ACCURACY							
									PROBABILITY LIMITS					
		NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	PR.LIMS. UP	NO.VAL. COLL.PRS	NO. AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG	5	2		-27	+32					-14	+10		
(TSP)	TOT	14	7				103	12						
I12128	AVG	2	1		-33	+39			-04	+04	-02	-01		
(PB)	TOT	4	2				32	3						
I42401	AVG								-11	+16				
(SO2)	TOT							2						

REGION 03 STATE 09 DISTRICT OF COLUMBIA

AUTOMATED ANALYZERS

POL.CD.		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
		NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	PR.LIMS. UP	NO. AUDITS	NO.AUDS LEVEL 4	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG*	2		-14	+12			-12	+03	-12	+02	-10	-01		
(SO2)	TOT	8	63			11									
C44201	AVG*	2		-15	+13			-15	+03	-13	+07	-11	+08		
(O3)	TOT	8	56			11									
C42101	AVG*	3		-06	+07			-19	+17	-03	+03	-03	+04		
(CO)	TOT	12	104			8									
C42602	AVG	2		-09	+11			-08	+13	-08	+06	-10	+06		
(NO2)	TOT	8	58			11									

MANUAL METHODS

POL.CD.		PRECISION					ACCURACY							
									PROBABILITY LIMITS					
		NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	PR.LIMS. UP	NO.VAL. COLL.PRS	NO. AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG	9	2		-06	+12					-07	+04		
(TSP)	TOT	36	8				107	17						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

```
REGION 03  STATE  21  MARYLAND
                                         AUTOMATED ANALYZERS
           ----------PRECISION--------- -----------------ACCURACY----------------
                                                  -------PROBABILITY LIMITS------
            NO.  PREC.  PR.LIMS.   NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*   3         -10 +12                   -41 +28 -18 +16 -15 +14
(SO2)   TOT   38    188               38

C44201  AVG*   6         -10 +07                   -24 +15 -09 +08 -05 +07
(O3)    TOT   72    446               83

C42101  AVG    2         -11 +09                   -18 +28 -03 +15 -05 +07
(CO)    TOT   18    102               13

C42602  AVG*   3         -13 +13                   -34 +65 -10 +16 -07 +06
(NO2)   TOT   41    223               38

                                         MANUAL METHODS
          -----------PRECISION-----------  ---------------ACCURACY---------------
                      NO.    COLL.                             --PROBABILITY LIMITS---
           NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.     NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES  <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG*   8       2          -10 +09                          -07 +12
(TSP)   TOT   196     48                     551       104


REGION 03  STATE  39  PENNSYLVANIA
                                         AUTOMATED ANALYZERS
           ----------PRECISION--------- -----------------ACCURACY----------------
                                                  -------PROBABILITY LIMITS------
            NO.  PREC.  PR.LIMS.   NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*  11         -13 +10                   -16 +16 -13 +15 -13 +11
(SO2)   TOT  137    443               73

C44201  AVG*   9         -11 +13                   -14 +17 -11 +13 -11 +10 -11 +17
(O3)    TOT   99    299               62        7

C42101  AVG*   4         -08 +06                   -14 +08 -06 +02 -03 +02
(CO)    TOT   30    112               28

C42602  AVG    3         -11 +07                   -13 +26 -07 +19 -06 +18
(NO2)   TOT   27     77               35

                                         MANUAL METHODS
          -----------PRECISION-----------  ---------------ACCURACY---------------
                      NO.    COLL.                             --PROBABILITY LIMITS---
           NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.     NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES  <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG*  50       2          -12 +10                          -06 +10
(TSP)   TOT   553     25                     319       166

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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(Continued)

TABLE 6. (Continued)

REGION 03 STATE 48 VIRGINIA

AUTOMATED ANALYZERS

		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
POL.CD.		NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	PR.LIMS. UP	NO. AUDITS	NO.AUDS LEVEL 4	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG	6		-11	+07			-18	+05	-09	+06	-08	+04		
(SO2)	TOT	45	277			12									
C44201	AVG*	5		-15	+12			-14	+12	-05	+07	-05	+07	-10	+08
(O3)	TOT	36	224			15	12								
C42101	AVG*	6		-10	+08			-01	+03	-04	+04	-03	+02		
(CO)	TOT	47	271			14									
C42602	AVG	4		-15	+13			-28	+04	-07	-01	-09	+08		
(NO2)	TOT	28	151			8									

MANUAL METHODS

		PRECISION					ACCURACY							
									PROBABILITY LIMITS					
POL.CD.		NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	PR.LIMS. UP	NO.VAL. COLL.PRS	NO. AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG*	18	2		-11	+10					-04	+06		
(TSP)	TOT	307	38	9			567	92						
I42602	AVG*	8	2		-11	+11			-04	+06	-05	+03	-05	+04
(NO2)	TOT	8	2				15	32						

REGION 03 STATE 50 WEST VIRGINIA

AUTOMATED ANALYZERS

		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
POL.CD.		NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	PR.LIMS. UP	NO. AUDITS	NO.AUDS LEVEL 4	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG	1		-11	+07										
(SO2)	TOT	7	46												
C44201	AVG	1		-09	+07										
(O3)	TOT	5	26												
C42101	AVG*	1		-03	+08										
(CO)	TOT	4	16												
C42602	AVG*	1		-07	+13										
(NO2)	TOT	5	24												

MANUAL METHODS

		PRECISION					ACCURACY							
									PROBABILITY LIMITS					
POL.CD.		NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	PR.LIMS. UP	NO.VAL. COLL.PRS	NO. AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG	17	1		-11	+11					-07	+03		
(TSP)	TOT	101	7				82	14						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

REGION AVERAGES

REGION 03

AUTOMATED ANALYZERS

		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
		NO.	PREC.	PR.LIMS.		NO.	NO.AUDS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
POL.CD.		ANAL.	CHECKS	LOW	UP	AUDITS	LEVEL 4	LOW	UP	LOW	UP	LOW	UP	LOW	UP
C42401	AVG*	6		-12	+11			-24	+16	-14	+13	-12	+11		
(SO2)	TOT	266	1,144			144									
C44201	AVG*	5		-11	+11			-17	+14	-09	+09	-07	+08	-10	+11
(O3)	TOT	231	1,095			172	19								
C42101	AVG*	3		-08	+09			-12	+13	-06	+07	-05	+04		
(CO)	TOT	119	648			68									
C42602	AVG*	3		-11	+12			-23	+39	-08	+13	-07	+10		
(NO2)	TOT	113	549			93									

MANUAL METHODS

		PRECISION							ACCURACY					
			NO.	COLL.					PROBABILITY LIMITS					
		NO. OF	COLL.	SAMPS	PR.LIMS.		NO.VAL.	NO.	LEVEL 1		LEVEL 2		LEVEL 3	
POL.CD.		SAMPLERS	SITES	<LIMIT	LOW	UP	COLL.PRS	AUDITS	LOW	UP	LOW	UP	LOW	UP
I11101	AVG*	19	2		-11	+11					-06	+09		
(TSP)	TOT	1,207	133	9			1,729	405						
I12128	AVG	2	1		-33	+39			-04	+04	-02	-01		
(PB)	TOT	4	2				32	3						
I42401	AVG								-11	+16				
(SO2)	TOT							2						
I42602	AVG*	8	2		-11	+11			-04	+06	-05	+03	-05	+04
(NO2)	TOT	8	2				15	32						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

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                                     STATE AVERAGES

REGION 04  STATE  01  ALABAMA
                                         AUTOMATED ANALYZERS
              ------------PRECISION----------  -------------------ACCURACY-------------------
                                                              --------PROBABILITY LIMITS-------
               NO.   PREC.  PR.LIMS.   NO.       NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.       ANAL. CHECKS LOW  UP   AUDITS     LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*   2           -10 +09                      -12 +15 -10 +15 -07 +14
(SO2)   TOT   29    120                12

C44201  AVG    2           -10 +10                      -11 +09 -07 +08 -10 +09
(O3)    TOT   29    205                15

C42101  AVG*   4           -10 +05                      -11 +11 -05 +06 -03 +04
(CO)    TOT   16     74                 6

C42602  AVG    1           -10 +05
(NO2)   TOT    4     14

                                         MANUAL METHODS
             -------------PRECISION-------------  ------------------ACCURACY-----------------
                       NO.     COLL.                                 --PROBABILITY LIMITS---
              NO. OF  COLL.   SAMPS  PR.LIMS. NO.VAL.       NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.       SAMPLERS SITES  <LIMIT LOW  UP COLL.PRS    AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG*  16       2            -21 +15                             -03 +03
(TSP)   TOT    325     47       4             415         303

I12128  AVG    2       1            -10 +25
(PB)    TOT      2      1       2

I42401  AVG                                                       -08 +01 -08 +05 -03 +04
(SO2)   TOT                                                 5

I42602  AVG    2       1            -27 +16                       -06 +06 -02 +03 -01 +03
(NO2)   TOT      8      4      59                          12


REGION 04  STATE  10  FLORIDA
                                         AUTOMATED ANALYZERS
              ------------PRECISION----------  -------------------ACCURACY-------------------
                                                              --------PROBABILITY LIMITS-------
               NO.   PREC.  PR.LIMS.   NO.       NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.       ANAL. CHECKS LOW  UP   AUDITS     LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*   2           -16 +07                      -19 +11 -15 +07 -17 +10 -06 -04
(SO2)   TOT   64  1.046                76          3

C44201  AVG*   2           -10 +05                      -18 +16 -12 +11 -13 +11 -14 +06
(O3)    TOT   77    739                72          9

C42101  AVG*   3           -16 +06                      -13 +13 -06 +09 -05 [illegible]
(CO)    TOT  105  1.335                71

C42602  AVG*   2           -13 +14                      -11 +21 -05 +16 -07 +09
(NO2)   TOT   32    305                25

                                         MANUAL METHODS
             -------------PRECISION-------------  ------------------ACCURACY-----------------
                       NO.     COLL.                                 --PROBABILITY LIMITS---
              NO. OF  COLL.   SAMPS  PR.LIMS. NO.VAL.       NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.       SAMPLERS SITES  <LIMIT LOW  UP COLL.PRS    AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG*   7       2            -16 +17                             -06 +07
(TSP)   TOT    391    116      12            1.398        303

I12128  AVG    1       1            -46 +43                      -05 +05 -0[illegible] +04
(PB)    TOT      2      1       7              24          11

I42401  AVG*   4       2            -49 +46                      -15 +16 -08 +09 -08 +09
(SO2)   TOT     49     25      75             119          66

I42602  AVG*   3       2            -19 +36                      -03 +05 -02 +05 -01 +04
(NO2)   TOT     16     10     109             130          40

  * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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(Continued)

TABLE 6. (Continued)

REGION 04 STATE 11 GEORGIA

AUTOMATED ANALYZERS

POL.CD.		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
		NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	UP	NO. AUDITS	NO.AUDS LEVEL 4	LEVEL 1 LOW	UP	LEVEL 2 LOW	UP	LEVEL 3 LOW	UP	LEVEL 4 LOW	UP
C42401	AVG	9		-16	+08			-23	+13	-30	+18	-30	+18		
(SO2)	TOT	36	246			11									
C44201	AVG	5		-23	+10			-13	+27	-14	+20	-18	+18		
(O3)	TOT	20	137			6									
C42101	AVG	5		-11	+07			-12	+13	-03	+05	-03	+04		
(CO)	TOT	15	128			8									
C42602	AVG	1		-08	+10			-29	+08	-27	+11	-28	+13		
(NO2)	TOT	1	4			3									

MANUAL METHODS

POL.CD.		PRECISION					ACCURACY							
									PROBABILITY LIMITS					
		NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	UP	NO.VAL. COLL.PRS	NO. AUDITS	LEVEL 1 LOW	UP	LEVEL 2 LOW	UP	LEVEL 3 LOW	UP
I11101	AVG	59	5		-13	+12					-06	+08		
(TSP)	TOT	236	20				108	94						
I42602	AVG								-09	+07	-06	+08	-05	+08
(NO2)	TOT							4						

REGION 04 STATE 18 KENTUCKY

AUTOMATED ANALYZERS

POL.CD.		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
		NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	UP	NO. AUDITS	NO.AUDS LEVEL 4	LEVEL 1 LOW	UP	LEVEL 2 LOW	UP	LEVEL 3 LOW	UP	LEVEL 4 LOW	UP
C42401	AVG	7		-17	+14			-18	+21	-11	+20	-10	+12	-12	+05
(SO2)	TOT	55	241			41	10								
C44201	AVG	11		-20	+16			-15	+15	-15	+16	-17	+16		
(O3)	TOT	91	399			83									
C42101	AVG	6		-14	+10			-15	+12	-06	+09	-08	+10		
(CO)	TOT	48	227			38									
C42602	AVG	4		-16	+14			-23	+27	-21	+17	-19	+12		
(NO2)	TOT	26	92			28									

MANUAL METHODS

POL.CD.		PRECISION					ACCURACY							
									PROBABILITY LIMITS					
		NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	UP	NO.VAL. COLL.PRS	NO. AUDITS	LEVEL 1 LOW	UP	LEVEL 2 LOW	UP	LEVEL 3 LOW	UP
I11101	AVG*	65	5		-12	+11					-10	+14		
(TSP)	TOT	518	37				445	146						
I42401	AVG	55	5		-08	+07			-26	+01	-10	+08	-09	+06
(SO2)	TOT	383	38	350			437	97						
I42602	AVG	54	5		-64	+78			-11	+13	-09	+07	-09	+07
(NO2)	TOT	377	37	246			430	96						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

REGION 04 STATE 25 MISSISSIPPI

AUTOMATED ANALYZERS

		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
		NO.	PREC.	PR.LIMS.		NO.	NO.AUDS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
POL.CD.		ANAL.	CHECKS	LOW	UP	AUDITS	LEVEL 4	LOW	UP	LOW	UP	LOW	UP	LOW	UP
C42401	AVG	1		-18	+01			-21	+09	-16	+05	-19	+05		
(SO2)	TOT	3	23			6									
C44201	AVG*							-18	+01	-07	-02	-08	+01		
(O3)	TOT					7									
C42101	AVG*							-07	+04	-04	+07	-03	+04		
(CO)	TOT					4									
C42602	AVG							-19	-04	-05	+04	-03	+01		
(NO2)	TOT					2									

MANUAL METHODS

		PRECISION					ACCURACY							
			NO.	COLL.					PROBABILITY LIMITS					
		NO. OF	COLL.	SAMPS	PR.LIMS.		NO.VAL.	NO.	LEVEL 1		LEVEL 2		LEVEL 3	
POL.CD.		SAMPLERS	SITES	<LIMIT	LOW	UP	COLL.PRS	AUDITS	LOW	UP	LOW	UP	LOW	UP
I11101	AVG	23	3		-22	+16					-04	+11		
(TSP)	TOT	93	12				109	18						

REGION 04 STATE 34 NORTH CAROLINA

AUTOMATED ANALYZERS

		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
		NO.	PREC.	PR.LIMS.		NO.	NO.AUDS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
POL.CD.		ANAL.	CHECKS	LOW	UP	AUDITS	LEVEL 4	LOW	UP	LOW	UP	LOW	UP	LOW	UP
C42401	AVG*	2		-16	+06			-15	+06	-16	+06	-13	+06	-05	+07
(SO2)	TOT	19	98			23	7								
C44201	AVG*	3		-09	+09			-13	+09	-08	+07	-05	+05		
(O3)	TOT	36	223			49									
C42101	AVG	3		-09	+05			-10	+05	-06	+03	-05	+02		
(CO)	TOT	36	207			72									

MANUAL METHODS

		PRECISION					ACCURACY							
			NO.	COLL.					PROBABILITY LIMITS					
		NO. OF	COLL.	SAMPS	PR.LIMS.		NO.VAL.	NO.	LEVEL 1		LEVEL 2		LEVEL 3	
POL.CD.		SAMPLERS	SITES	<LIMIT	LOW	UP	COLL.PRS	AUDITS	LOW	UP	LOW	UP	LOW	UP
I11101	AVG*	22	3		-13	+15					-10	+10		
(TSP)	TOT	353	53	2			475	357						
I12128	AVG*	4	2		-29	+43			-02	+13	+01	+05	-04	+03
(PB)	TOT	11	7	18			98	8						
I42401	AVG*	7	3		-59	+69			-17	+07	-12	+06	-10	+06
(SO2)	TOT	89	42	537			295	209						
I42602	AVG*	6	3		-41	+48			-05	+11	-03	+07	-04	+06
(NO2)	TOT	97	48	266			380	208						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

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REGION 04  STATE  42  SOUTH CAROLINA
                                      AUTOMATED ANALYZERS
            ----------PRECISION--------- ------------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
             NO.  PREC.  PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG    4         -05 +06                   -18 +12 -11 +10 -10 +10
(SO2)   TOT   17    430                 60

C44201  AVG    7         -05 +05                   -11 +11 -08 +07 -08 +07
(O3)    TOT   28 1,235               107

C42101  AVG    2         -03 +04                   -17 +10 -05 +05 -03 +06
(CO)    TOT    7    271                 28

                                      MANUAL METHODS
           -----------PRECISION-----------  ---------------ACCURACY---------------
                    NO.   COLL.                             --PROBABILITY LIMITS---
           NO. OF  COLL. SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG   62      3          -09 +10                         -03 +03
(TSP)   TOT   246     12      1            345       427

I12128  AVG    7      2          -21 +23                         -03 +03
(PB)    TOT    26      9      3             26       427

I42602  AVG*   8      3          -27 +24                 -12 +13 -01 +02 -09 +05
(NO2)   TOT    32     12     33             67        20

REGION 04  STATE  44  TENNESSEE
                                      AUTOMATED ANALYZERS
            ----------PRECISION--------- ------------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
             NO.  PREC.  PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG    2         -12 +07                   -13 +03 -14 +07 -14 +12
(SO2)   TOT   15    183                 18       1

C44201  AVG*   3         -09 +08                   -10 +08 -09 +08 -09 +09 +00 +00
(O3)    TOT   50    357                 60

C42101  AVG*   3         -08 +04                   -13 +07 -07 +05 -06 +04 +00 +00
(CO)    TOT   44    237                 63

                                      MANUAL METHODS
           -----------PRECISION-----------  ---------------ACCURACY---------------
                    NO.   COLL.                             --PROBABILITY LIMITS---
           NO. OF  COLL. SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG*  20      2          -08 +08                         -08 +09
(TSP)   TOT   402     46                   638       474

I12128  AVG   16      2          -18 +12                 -11 +05 -11 +02 -07 +07
(PB)    TOT    64      8     12             90        60

I42602  AVG    2      1          -13 +11                 -12 +13 -07 +06 -07 +08
(NO2)   TOT    12      6      2             65        47

    * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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(Continued)

TABLE 6. (Continued)

REGION AVERAGES

REGION 04

AUTOMATED ANALYZERS

		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
		NO.	PREC.	PR.LIMS.		NO.	NO.AUDS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
POL.CD.		ANAL.	CHECKS	LOW	UP	AUDITS	LEVEL 4	LOW	UP	LOW	UP	LOW	UP	LOW	UP
C42401	AVG*	3		-16	+08			-17	+11	-15	+10	-15	+10	-08	+05
(SO2)	TOT	229	2,387			247	21								
C44201	AVG*	3		-11	+09			-14	+12	-10	+09	-11	+09	-09	+04
(O3)	TOT	341	3,295			399	9								
C42101	AVG*	3		-10	+06			-13	+10	-06	+06	-05	+05	+00	+00
(CO)	TOT	271	2,479			292									
C42602	AVG*	2		-14	+13			-18	+20	-13	+15	-14	+10		
(NO2)	TOT	63	415			58									

MANUAL METHODS

		PRECISION					ACCURACY							
									PROBABILITY LIMITS					
			NO.	COLL.										
		NO. OF	COLL.	SAMPS	PR.LIMS.		NO.VAL.	NO.	LEVEL 1		LEVEL 2		LEVEL 3	
POL.CD.		SAMPLERS	SITES	<LIMIT	LOW	UP	COLL.PRS	AUDITS	LOW	UP	LOW	UP	LOW	UP
I11101	AVG*	20	3		-14	+14					-07	+08		
(TSP)	TOT	2,564	343	19			3,933	2,102						
I12128	AVG*	8	2		-25	+27			-07	+08	-05	+03	-06	+06
(PB)	TOT	105	26	42			238	506						
I42401	AVG*	16	3		-61	+64			-18	+09	-10	+07	-08	+07
(SO2)	TOT	521	105	962			851	379						
I42602	AVG*	13	3		-36	+42			-07	+10	-04	+06	-04	+06
(NO2)	TOT	542	117	711			1,080	427						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

STATE AVERAGES

REGION 05 STATE 14 ILLINOIS

AUTOMATED ANALYZERS

		PRECISION				ACCURACY									
								PROBABILITY LIMITS							
		NO.	PREC.	PR.LIMS.		NO.	NO.AUDS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
POL.CD.		ANAL.	CHECKS	LOW	UP	AUDITS	LEVEL 4	LOW	UP	LOW	UP	LOW	UP	LOW	UP
C42401	AVG*	7		-18	+08			-07	+10	-06	+09	-08	+12		
(SO2)	TOT	59	629			20									
C44201	AVG*	6		-24	+09			-07	+10	-07	+03	-08	+03		
(O3)	TOT	45	459			17									
C42101	AVG*	1		-12	+16			-08	-02	-06	+04	-08	+05		
(CO)	TOT	8	66			12									
C42602	AVG*	1		-22	+11			-10	+27	-15	+14	-17	+14		
(NO2)	TOT	6	55			10									

MANUAL METHODS

		PRECISION					ACCURACY							
			NO.	COLL.					PROBABILITY LIMITS					
		NO. OF	COLL.	SAMPS	PR.LIMS.		NO.VAL.	NO.	LEVEL 1		LEVEL 2		LEVEL 3	
POL.CD.		SAMPLERS	SITES	<LIMIT	LOW	UP	COLL.PRS	AUDITS	LOW	UP	LOW	UP	LOW	UP
I11101	AVG*	12	3		-16	+16					-08	+08		
(TSP)	TOT	139	35	7			434	47						

REGION 05 STATE 15 INDIANA

AUTOMATED ANALYZERS

		PRECISION				ACCURACY									
								PROBABILITY LIMITS							
		NO.	PREC.	PR.LIMS.		NO.	NO.AUDS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
POL.CD.		ANAL.	CHECKS	LOW	UP	AUDITS	LEVEL 4	LOW	UP	LOW	UP	LOW	UP	LOW	UP
C42401	AVG*	5		-14	+09			-19	+15	-11	+10	-09	+10	-13	+11
(SO2)	TOT	118	622			65	5								
C44201	AVG*	3		-15	+14			-11	+10	-10	+08	-09	+06		
(O3)	TOT	65	309			35									
C42101	AVG*	2		-12	+13			-19	+17	-12	+05	-07	+02		
(CO)	TOT	18	95			15									

MANUAL METHODS

		PRECISION					ACCURACY							
			NO.	COLL.					PROBABILITY LIMITS					
		NO. OF	COLL.	SAMPS	PR.LIMS.		NO.VAL.	NO.	LEVEL 1		LEVEL 2		LEVEL 3	
POL.CD.		SAMPLERS	SITES	<LIMIT	LOW	UP	COLL.PRS	AUDITS	LOW	UP	LOW	UP	LOW	UP
I11101	AVG*	9	2		-10	+15					-04	+05		
(TSP)	TOT	375	78	162			853	208						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

```
REGION 05  STATE  23  MICHIGAN
                                            AUTOMATED ANALYZERS
              ----------PRECISION--------- ----------------ACCURACY----------------
                                                          -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.   NO.      NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.      ANAL. CHECKS LOW  UP  AUDITS     LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*   7          -18 +11                     -26 +18 -14 +14 -16 +16
(SO2)   TOT   54    246              19

C44201  AVG    5          -08 +09                     -16 +18 -10 +10 -10 +10
(O3)    TOT   45    211              35          1

C42101  AVG*   5          -09 +04                     -02 +10 -10 +09 -13 +08
(CO)    TOT   20    121               5

C42602  AVG*   3          -14 +08                     -01 +06 +00 +00 -09 +02
(NO2)   TOT   11     60               4

                                            MANUAL METHODS
            -----------PRECISION-----------  --------------ACCURACY--------------
                      NO.    COLL.                                 --PROBABILITY LIMITS---
            NO. OF   COLL.   SAMPS  PR.LIMS. NO.VAL.     NO.   LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.     SAMPLERS SITES  <LIMIT  LOW  UP  COLL.PRS  AUDITS  LOW  UP LOW  UP LOW  UP

I11101  AVG   18       2            -10 +10                             -06 +10
(TSP)   TOT  144      16       2               189       47

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES


REGION 05  STATE  24  MINNESOTA
                                            AUTOMATED ANALYZERS
              ----------PRECISION--------- ----------------ACCURACY----------------
                                                          -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.   NO.      NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.      ANAL. CHECKS LOW  UP  AUDITS     LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG   11          -13 +09                     -15 +16 -09 +13 -09 +11
(SO2)   TOT    44   414              29

C44201  AVG    5          -09 +10                     -19 +14 -08 +07 -09 +06
(O3)    TOT   19    340              20

C42101  AVG    4          -12 +04                     -11 +11 -05 +05 -04 +04
(CO)    TOT   14    201              16

C42602  AVG    2          -10 +13
(NO2)   TOT     7    55

                                            MANUAL METHODS
            -----------PRECISION-----------  --------------ACCURACY--------------
                      NO.    COLL.                                 --PROBABILITY LIMITS---
            NO. OF   COLL.   SAMPS  PR.LIMS. NO.VAL.     NO.   LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.     SAMPLERS SITES  <LIMIT  LOW  UP  COLL.PRS  AUDITS  LOW  UP LOW  UP LOW  UP

I11101  AVG    6       3            -10 +08                             -04 +06
(TSP)   TOT   24      12       4               155       84
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(Continued)

TABLE 6. (Continued)

REGION 05 STATE 36 OHIO

AUTOMATED ANALYZERS

POL.CD.		PRECISION NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	PR.LIMS. UP	NO. AUDITS	ACCURACY NO.AUDS LEVEL 4	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG*	2		-16	+09			-17	+14	-15	+14	-14	+15		
(SO2)	TOT	84	513			59									
C44201	AVG*	2		-10	+11			-16	+15	-12	+12	-10	+11		
(O3)	TOT	81	453			80									
C42101	AVG	2		-09	+05			-13	+12	-14	+09	-13	+09		
(CO)	TOT	34	248			37									
C42602	AVG	2		-14	+11			-11	+13	-09	+03	-10	+06		
(NO2)	TOT	9	48			17									

MANUAL METHODS

POL.CD.		PRECISION NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	PR.LIMS. UP	ACCURACY NO.VAL. COLL.PRS	NO. AUDITS	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG*	19	2		-13	+09					-06	+07		
(TSP)	TOT	1,096	127	11			1,579	289						
I12128	AVG								-22	+07	-13	+02		
(PB)	TOT							16						
I42401	AVG	15	3		-42	+64			-12	+09	-09	+07	-06	+05
(SO2)	TOT	106	20	250			37	185						
I42602	AVG*	16	4		-60	+60			-06	+13	-03	+07	-02	+05
(NO2)	TOT	112	25	81			204	174						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

REGION 05 STATE 51 WISCONSIN

AUTOMATED ANALYZERS

POL.CD.		PRECISION NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	PR.LIMS. UP	NO. AUDITS	ACCURACY NO.AUDS LEVEL 4	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG	13		-13	+08			-15	+06	-10	+06	-11	+05	-14	+03
(SO2)	TOT	53	301			16	4								
C44201	AVG	4		-09	+08			-14	+08	-11	+07	-13	+11		
(O3)	TOT	16	88			5									
C42101	AVG	2		-07	+13			-03	+06	-02	+06	-05	+05		
(CO)	TOT	8	51			5									
C42602	AVG	2		-27	+10			-31	+74	-11	+16	-06	+03		
(NO2)	TOT	8	42			6									

MANUAL METHODS

POL.CD.		PRECISION NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	PR.LIMS. UP	ACCURACY NO.VAL. COLL.PRS	NO. AUDITS	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG	16	2		-04	+06					-03	+02		
(TSP)	TOT	64	8	1			105	17						

(Continued)

TABLE 6. (Continued)

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ENVIRONMENTAL PROTECTION AGENCY          EMSL PRECISION/ACCURACY REPORTING SYSTEM

                            ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES
DATE 01/24/83                    DATA SELECTED FOR THE YEAR 1981
PROGRAM PA240                                                          FILE NO. PA240R01
   -                                    REGION AVERAGES

REGION  05

                                           AUTOMATED ANALYZERS
               ----------PRECISION--------- -----------------ACCURACY----------------
                                                     -------PROBABILITY LIMITS------
                 NO.  PREC.  PR.LIMS.   NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.         ANAL. CHECKS LOW  UP  AUDITS    LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*    5            -16 +09                    -17 +13 -12 +12 -12 +13 -13 +07
(SO2)   TOT   412  2,725                208           9
                                            
C44201  AVG*    3            -12 +11                    -14 +13 -10 +09 -09 +08
(O3)    TOT   269  1,860                192           1

C42101  AVG*    2            -10 +09                    -13 +11 -11 +07 -10 +06
(CO)    TOT   102    782                 90

C42602  AVG*    2            -17 +11                    -13 +27 -11 +09 -12 +08
(NO2)   TOT    41    260                 37

                                           MANUAL METHODS
              -----------PRECISION-----------  ---------------ACCURACY---------------
                       NO.    COLL.                                 --PROBABILITY LIMITS---
               NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.     NO.   LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.       SAMPLERS SITES <LIMIT  LOW  UP COLL.PRS   AUDITS  LOW  UP LOW  UP LOW  UP

I11101  AVG*  15        2            -12 +12                                -05 +07
(TSP)   TOT  1,842    276     187                3,315     692

I12128  AVG                                                      -22 +07 -13 +02
(PB)    TOT                                                 16

I42401  AVG   15        3            -42 +64                     -12 +09 -03 +07 -06 +05
(SO2)   TOT    106     20     250                   37     185

I42602  AVG*  16        4            -60 +60                     -06 +13 -03 +07 -02 +05
(NO2)   TOT    112     25      81                  204     174

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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(Continued)

TABLE 6. (Continued)

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                                  STATE AVERAGES

REGION 06  STATE  04  ARKANSAS
                                      AUTOMATED ANALYZERS
            ----------PRECISION--------- -----------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
             NO.  PREC.  PR.LIMS.  NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG    2         -04 +09                   -13 +13 -17 +13 -13 +09
(SO2)   TOT     6     25               7

C44201  AVG*   2         -04 +07                   -06 +03 -04 +04 -05 +07
(O3)    TOT     9     49               9

C42602  AVG*   1         -06 +06                   -01 +12 -02 +00 -03 +00 -04 +02
(NO2)   TOT     3     14               4         2

                                      MANUAL METHODS
           -----------PRECISION-----------  ---------------ACCURACY---------------
                    NO.   COLL.                           --PROBABILITY LIMITS---
            NO. OF  COLL. SAMPS  PR.LIMS. NO.VAL.     NO. LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG* 25       3          -01 +17                          +04 +09
(TSP)   TOT      98    12    150           150       96

I42401  AVG*  1       1          -19 +99                          +00 +05
(SO2)   TOT      1      1     14              1        10

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

REGION 06  STATE  19  LOUISIANA
                                      AUTOMATED ANALYZERS
            ----------PRECISION--------- -----------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
             NO.  PREC.  PR.LIMS.  NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG    2         -25 +10                   -12 +12 -12 +14 -11 +15 -07 -01
(SO2)   TOT    12     39              13         2

C44201  AVG    5         -13 +10                   -14 +15 -12 +12 -09 +10 -07 +10
(O3)    TOT    42    218              51         6

C42101  AVG    2         -21 +22                   -34 +44 -24 +33 -10 +08
(CO)    TOT     9     42               7

C42602  AVG    2         -27 +14                   -19 +13 -12 +07 -10 -02
(NO2)   TOT     8     23               4

                                      MANUAL METHODS
           -----------PRECISION-----------  ---------------ACCURACY---------------
                    NO.   COLL.                           --PROBABILITY LIMITS---
            NO. OF  COLL. SAMPS  PR.LIMS. NO.VAL.     NO. LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG  23       2          -06 +06                          -04 +05
(TSP)   TOT      70     6                        6      124

I42401  AVG   8       2          -12 -02
(SO2)   TOT      8      2      5              2

I42602  AVG  25       2          -37 +04                  -06 +05 -04 +02 -03 +02
(NO2)   TOT      49     4      6              4       30
```

(Continued)

TABLE 6. (Continued)

REGION 06 STATE 32 NEW MEXICO

AUTOMATED ANALYZERS

POL.CD.		PRECISION NO. ANAL.	PRECISION PREC. CHECKS	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	ACCURACY NO. AUDITS	ACCURACY NO.AUDS LEVEL 4	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG*	5		-16	+13			-06	+05	-05	+03	-06	+06	-01	+00
(SO2)	TOT	27	81			8	3								
C44201	AVG	4		-08	+09			-03	+09	-04	+07	-06	+07	-06	+04
(O3)	TOT	24	103			19	10								
C42101	AVG*	4		-08	+05			-06	+08	-02	+01	-04	+04		
(CO)	TOT	21	122			10									
C42602	AVG	1		-18	+03			-23	+12	-18	+11	-16	+14	-04	-01
(NO2)	TOT	3	14			2	2								

MANUAL METHODS

POL.CD.		PRECISION NO. OF SAMPLERS	PRECISION NO. COLL. SITES	PRECISION COLL. SAMPS <LIMIT	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	ACCURACY NO.VAL. COLL.PRS	ACCURACY NO. AUDITS	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG*	8	3		-26	+28					-10	+06		
(TSP)	TOT	49	15	88			145	283						

REGION 06 STATE 37 OKLAHOMA

AUTOMATED ANALYZERS

POL.CD.		PRECISION NO. ANAL.	PRECISION PREC. CHECKS	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	ACCURACY NO. AUDITS	ACCURACY NO.AUDS LEVEL 4	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG	2		-11	+02			-27	+07	-17	+05	-18	+10		
(SO2)	TOT	10	35			10									
C44201	AVG*	2		-12	+06			-18	+15	-13	+11	-13	+14		
(O3)	TOT	20	89			13									
C42101	AVG	1		-08	+11			-27	+33	-15	+14	-14	+06		
(CO)	TOT	11	98			12									
C42602	AVG*	2		-14	+08			-41	+02	-26	+13	-22	+13		
(NO2)	TOT	13	50			11									

MANUAL METHODS

POL.CD.		PRECISION NO. OF SAMPLERS	PRECISION NO. COLL. SITES	PRECISION COLL. SAMPS <LIMIT	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	ACCURACY NO.VAL. COLL.PRS	ACCURACY NO. AUDITS	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG*	18	2		-22	+17					-06	+07		
(TSP)	TOT	161	17	2			171	53						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

```
REGION 06  STATE  45  TEXAS
                                        AUTOMATED ANALYZERS
              ----------PRECISION---------  ------------------ACCURACY-----------------
                                                           -------PROBABILITY LIMITS------
               NO.  PREC.  PR.LIMS.   NO.      NO.AUDS LEVEL 1 LEVEL 2 LE/EL 3 LEVEL 4
POL.CD.       ANAL. CHECKS LOW  UP  AUDITS     LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*   8           -19 +08                     -13 +20 -11 +10 -12 +12
(SO2)   TOT   87    246               81

C44201  AVG*  10           -12 +13                     -16 +21 -12 +15 -13 +15
(O3)    TOT  123    631              112

C42101  AVG*   4           -07 +11                     -17 +21 -13 +13 -11 +13 -08 +05
(CO)    TOT   37    261               81

C42602  AVG    6           -07 +06                     -24 +18 -14 +07 -11 +04
(NO2)   TOT   63    164               61

                                        MANUAL METHODS
             -----------PRECISION-----------  ---------------ACCURACY---------------
                      NO.    COLL.                                --PROBABILITY LIMITS---
              NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.       NO.   LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.       SAMPLERS SITES <LIMIT LOW  UP  COLL.PRS     AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG*  24       2            -08 +10                              -04 +08
(TSP)   TOT     494    46      54             180        336

I42401  AVG*  11       1            +00 +00                      -17 +07 -11 +09 -06 +06
(SO2)   TOT      21     2      10              12         29

I42602  AVG*  10       2            -71 +65                      -09 +13 -04 +08 -07 +06
(NO2)   TOT      41     6      35              74         60
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                                     REGION AVERAGES

REGION  06
                                        AUTOMATED ANALYZERS
              ----------PRECISION---------  ------------------ACCURACY-----------------
                                                           -------PROBABILITY LIMITS------
               NO.  PREC.  PR.LIMS.   NO.      NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.       ANAL. CHECKS LOW  UP  AUDITS     LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*   4           -16 +08                     -14 +13 -12 +09 -12 +10 -03 +00
(SO2)   TOT  142    426              119           5

C44201  AVG*   5           -11 +10                     -13 +15 -10 +11 -10 +11 -07 +07
(O3)    TOT  218  1,090              204          16

C42101  AVG*   3           -09 +11                     -22 +27 -14 +15 -11 +08 -08 +05
(CO)    TOT   98    523               80

C42602  AVG*   3           -13 +07                     -25 +13 -17 +09 -14 +06 -04 +01
(NO2)   TOT   90    265               82           4

                                        MANUAL METHODS
             -----------PRECISION-----------  ---------------ACCURACY---------------
                      NO.    COLL.                                --PROBABILITY LIMITS---
              NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.       NO.   LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.       SAMPLERS SITES <LIMIT LOW  UP  COLL.PRS     AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG*  20       2            -12 +18                              -04 +07
(TSP)   TOT     872    96     294             660      1,094

I42401  AVG*   8       1            -08 +24                      -17 +07 -08 +08 -06 +06
(SO2)   TOT      30     5      37              15         39

I42602  AVG*  15       2            -59 +45                      -08 +11 -04 +06 -06 +07
(NO2)   TOT      90    10      41              78         98

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 6. (Continued)

```
                                    STATE AVERAGES

REGION 07  STATE  16  IOWA
                                  AUTOMATED ANALYZERS
                 ----------PRECISION--------- ------------------ACCURACY-----------------
                                                       -------PROBABILITY LIMITS------
                  NO.  PREC. PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.         ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*      2          -21 +11                   -16 +30 -11 +36 -18 +18
(SO2)   TOT      26      94             22

C44201  AVG*      2          -13 +17                   -11 +12 -16 +12 -12 +14
(O3)    TOT      19     141             17

C42101  AVG*      1          -19 +18                   -21 +09 -13 +09 -19 +16
(CO)    TOT      16      97             16

                                   MANUAL METHODS
          -----------PRECISION-----------  ---------------ACCURACY---------------
                   NO.   COLL.                             --PROBABILITY LIMITS---
           NO. OF COLL.  SAMPS PR.LIMS. NO.VAL.      NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.   SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG   20      2         -28 +34                           -05 +04
(TSP)   TOT    182     17      1          98      23

I12128  AVG                                                               -37 +15
(PB)    TOT                                         8

I42602  AVG                          -                   -04 -03 -04 -02 -04 -03
(NO2)   TOT                                         2

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES


REGION 07  STATE  17  KANSAS
                                  AUTOMATED ANALYZERS
                 ----------PRECISION--------- ------------------ACCURACY-----------------
                                                       -------PROBABILITY LIMITS------
                  NO.  PREC. PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.         ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG       2          -22 +15                   -25 +02 -18 +01
(SO2)   TOT       4      18              3

C44201  AVG       2          -39 +21                   -47 +17 -12 -07 -08 -06
(O3)    TOT       6      15              2

C42101  AVG       3          -10 +08                   -01 +05 -05 +06 -04 +04
(CO)    TOT       9      43             11

                                   MANUAL METHODS
          -----------PRECISION-----------  ---------------ACCURACY---------------
                   NO.   COLL.                             --PROBABILITY LIMITS---
           NO. OF COLL.  SAMPS PR.LIMS. NO.VAL.      NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.   SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG   20      3         -12 +17                           -14 +13
(TSP)   TOT     78     10                         43
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(Continued)

TABLE 6. (Continued)

```
REGION 07  STATE  26  MISSOURI
                                        AUTOMATED ANALYZERS
             ----------PRECISION--------- -----------------ACCURACY-----------------
                                                    -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.  NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.      ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*    4         -19 +19                   -22 +32 -39 +58 -29 +52 -01 -01
(SO2)   TOT    43     247              7          2

C44201  AVG     4         -10 +11                   -14 +11 -16 +11 -16 +09
(O3)    TOT    34     190              7

C42101  AVG*    3         -11 +07                   -01 +29 +03 +19 +02 +08
(CO)    TOT    25     162              2

C42602  AVG     3         -22 +22                   -08 +21 +05 +09 +06 +08
(NO2)   TOT    25     128              1

                                        MANUAL METHODS
             ----------PRECISION---------- ---------------ACCURACY-----------------
                       NO.  COLL.                           --PROBABILITY LIMITS---
              NO. OF  COLL. SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.      SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG     10      2          -14 +14                          -09 +10
(TSP)   TOT      122    24      2              260      39


REGION 07  STATE  28  NEBRASKA
                                        AUTOMATED ANALYZERS
             ----------PRECISION--------- -----------------ACCURACY-----------------
                                                    -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.  NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.      ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C44201  AVG     3         -10 +14                   -20 +10 -19 +14 -15 +17 -13 +10
(O3)    TOT    11      43              4

C42101  AVG     2         -06 +00
(CO)    TOT     3      13

                                        MANUAL METHODS
             ----------PRECISION---------- ---------------ACCURACY-----------------
                       NO.  COLL.                           --PROBABILITY LIMITS---
              NO. OF  COLL. SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.      SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG*    11      2          -08 +14                          -06 +05
(TSP)   TOT      116    25      1               15      68

I12128  AVG     10      1          -06 +04                  -22 +18 -35 +07 -28 +04
(PB)    TOT       10     1      4               16      10

I42401  AVG                                                 -26 +23 -17 +12 -15 +12
(SO2)   TOT                                             45

I42602  AVG                                                 -05 +07 -05 +04 -04 +04
(NO2)   TOT                                             44

     * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 6. (Continued)

REGION AVERAGES

REGION 07

AUTOMATED ANALYZERS

POL.CD.		PRECISION NO. ANAL.	PRECISION PREC. CHECKS	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	PRECISION NO. AUDITS	ACCURACY NO.AUDS LEVEL 4	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C42401	AVG*	3		-20	+15			-19	+27	-19	+35	-21	+27	-01	-01
(SO2)	TOT	73	359			32	2								
C44201	AVG*	3		-15	+15			-16	+12	-16	+10	-13	+12	-13	+10
(O3)	TOT	70	389			30									
C42101	AVG*	2		-14	+12			-16	+11	-09	+09	-12	+11		
(CO)	TOT	53	315			29									
C42602	AVG	3		-22	+22			-08	+21	+35	+09	+06	+08		
(NO2)	TOT	25	128			1									

MANUAL METHODS

POL.CD.		PRECISION NO. OF SAMPLERS	PRECISION NO. COLL. SITES	PRECISION COLL. SAMPS <LIMIT	PRECISION PR.LIMS. LOW	PRECISION PR.LIMS. UP	PRECISION NO.VAL. COLL.PRS	ACCURACY NO. AUDITS	PROBABILITY LIMITS LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG*	14	2		-15	+19					-08	+08		
(TSP)	TOT	498	76	4			373	173						
I12128	AVG	10	1		-06	+04			-22	+18	-35	+07	-31	+07
(PB)	TOT	10	1	4			16	18						
I42401	AVG								-26	+23	-17	+12	-15	+12
(SO2)	TOT							45						
I42602	AVG								-04	+05	-05	+03	-04	+03
(NO2)	TOT							46						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

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                                  STATE AVERAGES

REGION 08  STATE  06  COLORADO
                                      AUTOMATED ANALYZERS
            ----------PRECISION--------- -----------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
            NO.    PREC. PR.LIMS.   NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG    2         -13 +13                   -24 +15 -13 +06 -12 +05
(SO2)   TOT     8     49             7

C44201  AVG    4         -13 +11                   -19 +06 -13 +06 -12 +05
(O3)    TOT    14     85            10

C42101  AVG    2         -16 -04                   -09 +07 -02 +05 -03 +05 -02 +05
(CO)    TOT     8     50             7         4

C42602  AVG*   2         -22 +12                   -29 +57 -34 +25 -03 +06 -01 +04
(NO2)   TOT     8     46             4         4

                                      MANUAL METHODS
           -----------PRECISION-----------  ---------------ACCURACY---------------
                    NO.    COLL.                               --PROBABILITY LIMITS---
            NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG    2      2          -21 +27                           -08 +08
(TSP)   TOT     8      8                     157        46

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES


REGION 08  STATE  27  MONTANA
                                      AUTOMATED ANALYZERS
            ----------PRECISION--------- -----------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
            NO.    PREC. PR.LIMS.   NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG    1         -16 +12
(SO2)   TOT     5     43

C42101  AVG    1         -01 +12                   -28 +48 -21 +20 -26 +19
(CO)    TOT     1     10             3

                                      MANUAL METHODS
           -----------PRECISION-----------  ---------------ACCURACY---------------
                    NO.    COLL.                               --PROBABILITY LIMITS---
            NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG    4      2          -16 +13                           -09 +01
(TSP)   TOT    56     28     67              195         6
```

(Continued)

TABLE 6. (Continued)

```
REGION 08  STATE  35  NORTH DAKOTA
                                      AUTOMATED ANALYZERS
            ----------PRECISION--------- -----------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
             NO.  PREC.  PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG    4         -10 +05                   -15 +16 -15 +12 -20 +15
(SO2)   TOT   17     102               4

C44201  AVG    2         -15 +02                   -19 +22 -20 +17 -20 +17
(O3)    TOT    7      37               2

C42602  AVG    2         -06 +06                   -99 +87 -02 +05 -11 +23
(NO2)   TOT    8      48               2

                                      MANUAL METHODS
           -----------PRECISION-----------  ---------------ACCURACY--------------
                    NO.   COLL.                           --PROBABILITY LIMITS---
            NO. OF  COLL. SAMPS  PR.LIMS. NO.VAL.     NO. LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP  COLL.PRS AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG* 21       2          -08 +14                          -06 +02
(TSP)   TOT     84      8      5             105       23

I12128  AVG*  5       2          -23 +25                                  -07 +03
(PB)    TOT     15      6     57              77        4

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES


REGION 08  STATE  43  SOUTH DAKOTA
                                      AUTOMATED ANALYZERS
            ----------PRECISION--------- -----------------ACCURACY----------------
                                                   -------PROBABILITY LIMITS------
             NO.  PREC.  PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

                                      MANUAL METHODS
           -----------PRECISION-----------  ---------------ACCURACY--------------
                    NO.   COLL.                           --PROBABILITY LIMITS---
            NO. OF  COLL. SAMPS  PR.LIMS. NO.VAL.     NO. LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP  COLL.PRS AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG  21       2          -07 +04                          -05 +05
(TSP)   TOT     84      8      1             107      119
```

(Continued)

TABLE 6. (Continued)

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REGION 08  STATE  46  UTAH
                                        AUTOMATED ANALYZERS
             ----------PRECISION---------  ------------------ACCURACY-----------------
                                                           -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.   NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS    LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  U

C42401  AVG    2         -09 +06                    +04 +06 -15 +12 -11 +03
(SO2)   TOT     8    99                 9         4

C44201  AVG    2         -11 +03                    -06 +03 -05 +02 -10 +02
(O3)    TOT     8    92                 8         4

C42101  AVG    2         -03 +03                    -08 +13 -06 +08 -05 +04
(CO)    TOT     6    60                 4         1
                                        MANUAL METHODS
             -----------PRECISION-----------  ---------------ACCURACY---------------
                         NO.    COLL.                          --PROBABILITY LIMITS---
                 NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.         SAMPLERS SITES  <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  U

I11101  AVG    5     2           -08 +07                               -06 +05
(TSP)   TOT     20     7                      77        25

REGION 08  STATE  52  WYOMING
                                        AUTOMATED ANALYZERS
             ----------PRECISION---------  ------------------ACCURACY-----------------
                                                           -------PROBABILITY LIMITS-----
              NO.  PREC.  PR.LIMS.   NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS    LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  U
                                        MANUAL METHODS
             -----------PRECISION-----------  ---------------ACCURACY---------------
                         NO.    COLL.                          --PROBABILITY LIMITS--
                 NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL
POL.CD.         SAMPLERS SITES  <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  U

I11101  AVG   12     3           -06 +11                               -01 +05
(TSP)   TOT     49    12      5               136       17
                                   REGION AVERAGES

REGION  08
                                        AUTOMATED ANALYZERS
             ----------PRECISION---------  ------------------ACCURACY-----------------
                                                           -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.   NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.     ANAL. CHECKS LOW  UP  AUDITS    LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG    2         -12 +09                    -17 +13 -14 +09 -13 +07
(SO2)   TOT    38   293                20         4

C44201  AVG    2         -13 +05                    -13 +07 -12 +06 -12 +05
(O3)    TOT    29   214                20         4

C42101  AVG    2         -08 +01                    -13 +15 -06 +09 -08 +08 -02 +05
(CO)    TOT    15   120                14         5

C42602  AVG*   2         -14 +09                    -52 +67 -23 +18 -05 +12 -01 +04
(NO2)   TOT    16    94                 6         4
                                        MANUAL METHODS
             -----------PRECISION-----------  ---------------ACCURACY---------------
                         NO.    COLL.                          --PROBABILITY LIMITS---
                 NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.         SAMPLERS SITES  <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG* -  8     2          -13 +13                              -05 +04
(TSP)   TOT    301    71     78               777      236
                                                                               -07 +03
I12128  AVG*   5     2           -23 +25
(PB)    TOT     15     6     57               77         4

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 6. (Continued)

STATE AVERAGES

REGION 09 STATE 03 ARIZONA

AUTOMATED ANALYZERS

		PRECISION				ACCURACY									
								PROBABILITY LIMITS							
								LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
POL.CD.		NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	UP	NO. AUDITS	NO.AUDS LEVEL 4	LOW	UP	LOW	UP	LOW	UP	LOW	UP
C42401	AVG	2		-10	+10			-12	+16	-14	+22	-25	+25	-23	+24
(SO2)	TOT	12	59			4									
C44201	AVG*	6		-05	+08			-12	+10	-06	+08	-07	+06	-04	+04
(O3)	TOT	58	225			20	6								
C42101	AVG*	7		-12	+06			-25	+11	-04	+01	-03	+02		
(CO)	TOT	41	180			12									
C42602	AVG	2		-12	+09										
(NO2)	TOT	8	29			1									

MANUAL METHODS

		PRECISION					ACCURACY							
									PROBABILITY LIMITS					
									LEVEL 1		LEVEL 2		LEVEL 3	
POL.CD.		NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	UP	NO.VAL. COLL.PRS	NO. AUDITS	LOW	UP	LOW	UP	LOW	UP
I11101	AVG	18	2		-11	+16					-13	+00		
(TSP)	TOT	216	24				80	50						
I12128	AVG	33	2		-46	+71								
(PB)	TOT	132	8	19										

REGION 09 STATE 05 CALIFORNIA

AUTOMATED ANALYZERS

		PRECISION				ACCURACY									
								PROBABILITY LIMITS							
								LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
POL.CD.		NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	UP	NO. AUDITS	NO.AUDS LEVEL 4	LOW	UP	LOW	UP	LOW	UP	LOW	UP
C42401	AVG	9		-16	+10			-19	+11	-15	+09	-18	+07		
(SO2)	TOT	117	565			63	3								
C44201	AVG*	11		-15	+10			-20	+10	-11	+06	-10	+05	-10	+04
(O3)	TOT	124	631			125	121								
C42101	AVG*	15		-09	+07			-13	+13	-02	+08	-07	+04	-19	+04
(CO)	TOT	203	1,071			85	6								
C42602	AVG	12		-17	+13			-14	+05	-14	+10	-12	+09		
(NO2)	TOT	107	457			26	3								
C42601	AVG	8		-70	+57			-14	+12	-12	+09	-13	+07	-14	+11
(NO)	TOT	8	44			21	20								

MANUAL METHODS

		PRECISION					ACCURACY							
									PROBABILITY LIMITS					
									LEVEL 1		LEVEL 2		LEVEL 3	
POL.CD.		NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	UP	NO.VAL. COLL.PRS	NO. AUDITS	LOW	UP	LOW	UP	LOW	UP
I11101	AVG	9	4		-14	+12					-09	+08		
(TSP)	TOT	138	62	18			769	137						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

REGION 09 STATE 12 HAWAII

AUTOMATED ANALYZERS

		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
POL.CD.		NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	PR.LIMS. UP	NO. AUDITS	NO.AUDS LEVEL 4	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C44201	AVG							-14	+16	-11	+02	-12	+02		
(O3)	TOT					10									
C42101	AVG	2		-22	+23			-13	+28	-08	+10	-1[illegible]	+11		
(CO)	TOT	8	119			26									

MANUAL METHODS

		PRECISION						ACCURACY						
									PROBABILITY LIMITS					
POL.CD.		NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	PR.LIMS. UP	NO.VAL. COLL.PRS	NO. AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG	11	2		-12	+09					-04	+05		
(TSP)	TOT	44	8	2			111	49						
I42401	AVG*	8	2		-20	+13			-04	+04	-02	+02	-01	+02
(SO2)	TOT	32	8	40			62	61						

REGION 09 STATE 29 NEVADA

AUTOMATED ANALYZERS

		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
POL.CD.		NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	PR.LIMS. UP	NO. AUDITS	NO.AUDS LEVEL 4	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
C44201	AVG*	2		-13	+01			-13	+00	-13	+02	-14	+01	-02	+11
(O3)	TOT	18	77			12									
C42101	AVG*	2		-07	-01			-06	+04	-14	+10	-06	+02	-12	+03
(CO)	TOT	18	115			10									
C42602	AVG	3		-03	+06			-01	+01			+08	+08	+02	+08
(NO2)	TOT	13	36			4									

MANUAL METHODS

		PRECISION						ACCURACY						
									PROBABILITY LIMITS					
POL.CD.		NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	PR.LIMS. UP	NO.VAL. COLL.PRS	NO. AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP
I11101	AVG*	14	2		-05	+04					-06	+08		
(TSP)	TOT	112	16				106	37						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

```
                                 REGION AVERAGES

REGION  09
                                     AUTOMATED ANALYZERS
            ----------PRECISION--------- ----------------ACCURACY----------------
                                                 -------PROBABILITY LIMITS------
            NO.   PREC. PR.LIMS.  NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.    ANAL. CHECKS LOW  UP  AUDITS  LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG    7        -14 +10                  -18 +11 -15 +10 -19 +08 -23 +24
(SO2)   TOT  129    624              67        3

C44201  AVG*   7        -11 +07                  -17 +09 -11 +05 -10 +04 -09 +05
(O3)    TOT  200    933             167      127

C42101  AVG*   8        -11 +07                  -13 +13 -06 +08 -07 +04 -16 +04
(CO)    TOT  270  1,485             133        6

C42602  AVG    8        -12 +10                  -12 +04 -14 +10 -09 +09 +02 +08
(NO2)   TOT  128    522              31        3

C42601  AVG    8        -70 +57                  -14 +12 -12 +09 -13 +07 -14 +11
(NO)    TOT    8     44              21       20

                                     MANUAL METHODS
           -----------PRECISION----------  ---------------ACCURACY---------------
                     NO.  COLL.                                --PROBABILITY LIMITS---
           NO. OF   COLL. SAMPS  PR.LIMS. NO.VAL.     NO.   LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

I11101  AVG*  13     3          -11 +11                          -08 +06
(TSP)   TOT      510   110     20          1,066       273

I12128  AVG   33     2          -46 +71
(PB)    TOT      132     8     19

I42401  AVG*   8     2          -20 +13                  -04 +04 -02 +02 -01 +02
(SO2)   TOT       32     8     40             62        61

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 6. (Continued)

```
                                       STATE AVERAGES

REGION 10  STATE  02  ALASKA
                                        AUTOMATED ANALYZERS
               -----------PRECISION--------- ------------------ACCURACY-----------------
                                                      --------PROBABILITY LIMITS------
                NO.  PREC.  PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.        ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP
                                        MANUAL METHODS
              ------------PRECISION-----------  ----------------ACCURACY----------------
                                                          --PROBABILITY LIMITS---
                        NO.    COLL.
               NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.       SAMPLERS SITES  <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP
                                                                      -08 +10
I11101  AVG      2       1            -12 +11
                                             42         3
(TSP)   TOT        8      4      9


REGION 10  STATE  13  IDAHO
                                        AUTOMATED ANALYZERS
               -----------PRECISION--------- ------------------ACCURACY-----------------
                                                      --------PROBABILITY LIMITS------
                NO.  PREC.  PR.LIMS.   NO.    NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.        ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP
                                                      +09 +09 -15 +17 -06 +16 -07 +15
C42401  AVG      6          -09 +10
                                        4        4
(SO2)   TOT        6    34

C42101  AVG      2          -11 +09
(CO)    TOT        2    14
                                        MANUAL METHODS
              ------------PRECISION-----------  ----------------ACCURACY----------------
                                                          --PROBABILITY LIMITS---
                        NO.    COLL.
               NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.    NO.  LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.       SAMPLERS SITES  <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP
                                                                      -06 +05
I11101  AVG     23       3            -07 +10
                                             40        22
(TSP)   TOT       23       3
                                                                      -02 +01
I12128  AVG      4       1            -22 +10
                                             15         4
(PB)    TOT        4       1
```

(Continued)

TABLE 6. (Continued)

REGION 10 STATE 38 OREGON

AUTOMATED ANALYZERS

		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
		NO.	PREC.	PR.LIMS.		NO.	NO.AUDS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
POL.CD.		ANAL.	CHECKS	LOW	UP	AUDITS	LEVEL 4	LOW	UP	LOW	UP	LOW	UP	LOW	UP
C42401	AVG*	2		-17	+01			-20	+02	-10	-02	-10	+06		
(SO2)	TOT	8	44			8									
C44201	AVG*	2		-17	+09			-20	+15	-12	+15	-10	+14	-03	+01
(O3)	TOT	8	48			17	3								
C42101	AVG*	2		-04	+07			-18	+27	-06	+09	-07	+03		
(CO)	TOT	8	96			22									

MANUAL METHODS

		PRECISION					ACCURACY							
			NO.	COLL.					PROBABILITY LIMITS					
		NO. OF	COLL.	SAMPS	PR.LIMS.		NO.VAL.	NO.	LEVEL 1		LEVEL 2		LEVEL 3	
POL.CD.		SAMPLERS	SITES	<LIMIT	LOW	UP	COLL.PRS	AUDITS	LOW	UP	LOW	UP	LOW	UP
I11101	AVG	10	5		-13	+20					-06	+05		
(TSP)	TOT	39	18	13			232	144						

REGION 10 STATE 49 WASHINGTON

AUTOMATED ANALYZERS

		PRECISION					ACCURACY								
								PROBABILITY LIMITS							
		NO.	PREC.	PR.LIMS.		NO.	NO.AUDS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
POL.CD.		ANAL.	CHECKS	LOW	UP	AUDITS	LEVEL 4	LOW	UP	LOW	UP	LOW	UP	LOW	UP
C42401	AVG	8		-10	+08			-09	+08	-11	+08	-11	+06	-07	+04
(SO2)	TOT	31	387			22	2								
C44201	AVG	6		-08	+09			-06	+09	-07	+05	-06	+04		
(O3)	TOT	24	247			22									
C42101	AVG*	11		-10	+00			-06	+07	-04	+04	-03	+03		
(CO)	TOT	43	509			40									
C42602	AVG	2		-13	+14			-13	+06	-08	-02	-04	+01		
(NO2)	TOT	7	60			4									

MANUAL METHODS

		PRECISION					ACCURACY							
			NO.	COLL.					PROBABILITY LIMITS					
		NO. OF	COLL.	SAMPS	PR.LIMS.		NO.VAL.	NO.	LEVEL 1		LEVEL 2		LEVEL 3	
POL.CD.		SAMPLERS	SITES	<LIMIT	LOW	UP	COLL.PRS	AUDITS	LOW	UP	LOW	UP	LOW	UP
I11101	AVG	26	3		-10	+09					-09	+09		
(TSP)	TOT	103	13				166	32						
I12128	AVG	9	1		-09	+07								
(PB)	TOT	9	1											

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES.

(Continued)

TABLE 6. (Continued)

```
                                         REGION AVERAGES

REGION  10
                                              AUTOMATED ANALYZERS
                 -----------PRECISION---------  -----------------ACCURACY-----------------
                                                        --------PROBABILITY LIMITS-------
                 NO.  PREC.  PR.LIMS.   NO.    NO.AUDS  LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.         ANAL. CHECKS LOW  UP  AUDITS   LEVEL 4  LOW  UP LOW  UP LOW  UP LOW  UP

C42401  AVG*     5           -13 +05                    -11 +06 -11 +05 -10 +07 -07 +10
(SO2)   TOT     45    465               34          6

C44201  AVG*     4           -13 +09                    -14 +12 -10 +11 -09 +09 -03 +01
(O3)    TOT     32    295               39          3

C42101  AVG*     6           -07 +04                    -12 +17 -05 +06 -05 +03
(CO)    TOT     53    619               62

C42602  AVG      2           -13 +14                    -13 +06 -08 -02 -04 +01
(NO2)   TOT      7     60                4

                                              MANUAL METHODS
                -----------PRECISION-----------  ---------------ACCURACY----------------
                        NO.    COLL.                              --PROBABILITY LIMITS---
                NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.     NO.   LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.        SAMPLERS SITES  <LIMIT LOW  UP COLL.PRS   AUDITS  LOW  UP LOW  UP LOW  UP

I11101  AVG     13       3            -11 +13                            -07 +07
(TSP)   TOT      173     38      22              480       201

I12128  AVG      7       1            -16 +09                            -02 +01
(PB)    TOT       13      2                       15         4

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 6. (Continued)

```
DATE 01/24/83          ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES
PROGRAM PA240              DATA SELECTED FOR THE YEAR 1981                FILE NO. PA240R01

                                   NATIONAL AVERAGES


                                  AUTOMATED ANALYZERS
             -----------PRECISION---------  -----------------ACCURACY-----------------
                                                     -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.   NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
POL.CD.      ANAL. CHECKS LOW  UP  AUDITS    LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

                                                     -17 +13 -13 +11 -13 +11 -09 +06
C42401  AVG*   5          -15 +09
(SO2)   TOT 1,681 10,833          1,064         50

                                                     -14 +12 -10 +09 -10 +09 -09 +06
C44201  AVG*   4          -12 +10
(O3)    TOT 1,684 10,493          1,393        179

                                                     -13 +13 -07 +08 -09 +06 -09 +04
C42101  AVG*   4          -18 +08
(CO)    TOT 1,118  8,044            821         11

                                                     -21 +26 -12 +11 -10 +08 -01 +03
C42602  AVG*   3          -14 +11
(NO2)   TOT   914  2,306            331         11

                                                     -14 +12 -12 +09 -13 +07 -14 +11
C42601  AVG    8          -78 +07
(NO)    TOT     8     44             21         29

                                  MANUAL METHODS
           -----------PRECISION-----------  ---------------ACCURACY----------------
                    NO.    COLL.                                --PROBABILITY LIMITS---
            NO. OF  COLL.  SAMPS  PR.LIMS. NO.VAL.     NO.   LEVEL 1 LEVEL 2 LEVEL 3
POL.CD.    SAMPLERS SITES <LIMIT LOW  UP  COLL.PRS  AUDITS  LOW  UP LOW  UP LOW  UP

                                                                 -06 +07
I11101  AVG*   18      2         -13 +13
(TSP)   TOT 9,260  1,274    644           13,307    5,571

                                                          -12 +08 -09 +02 -12 +04
I12128  AVG*   10      2         -25 +30
(PB)    TOT   286     49    125              432      577

                                                          -16 +09 -09 +07 -08 +06
I42401  AVG*   14      3         -51 +57
(SO2)   TOT   689    138  1,289              965      711

                                                          -07 +10 -04 +06 -04 +05
I42602  AVG*   14      3         -41 +44
(NO2)   TOT   752    194    833            1,377      769

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

```
DATE 01/24/83          ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES
PROGRAM PA240              DATA SELECTED FOR THE YEAR 1981                FILE NO. PA240R01

                                   REGIONAL SUMMARY

POL.CD. C42401  SULFUR DIOXIDE
                                  AUTOMATED ANALYZERS
             -----------PRECISION---------  -----------------ACCURACY-----------------
                                                     -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.   NO.     NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
REGION       ANAL. CHECKS LOW  UP  AUDITS    LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

                                                     -11 +08 -08 +05 -09 +08
  01    AVG*   6          -10 +08
        TOT  133  1,601              80

                                                     -10 +09 -08 +10 -10 +10
  02    AVG   18          -12 +10
        TOT  214    889             113

                                                     -24 +16 -14 +13 -12 +11
  03    AVG*   6          -12 +11
        TOT  266  1,144             144

                                                     -17 +11 -15 +10 -15 +10 -08 +05
  04    AVG*   3          -16 +08
        TOT  229  2,387             247         21

                                                     -17 +13 -12 +12 -12 +13 -13 +07
  05    AVG*   5          -16 +09
        TOT  412  2,723             208          9

                                                     -14 +13 -12 +09 -12 +10 -03 +00
  06    AVG*   4          -16 +08
        TOT  142    426             119          5

                                                     -19 +27 -19 +39 -21 +27 -01 -01
  07    AVG*   3          -20 +13
        TOT   73    359              32          2

                                                     -17 +13 -14 +09 -13 +07
  08    AVG    2          -12 +09
        TOT   38    293              20          4

                                                     -18 +11 -15 +10 -19 +08 -23 +24
  09    AVG    7          -14 +10
        TOT  129    624              67          3

                                                     -11 +06 -11 +05 -10 +07 -07 +10
  10    AVG*   5          -13 +05
        TOT   49    465              34          6


                                                     -17 +13 -13 +11 -13 +11 -09 +06
NATION  AVG*   5          -13 +09
        TOT 1,681 10,833          1,064         50

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 6. (Continued)

```
                      ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES
DATE 01/24/83            DATA SELECTED FOR THE YEAR 1981
PROGRAM PA240                                                      FILE NO. PA240R01
                                  REGIONAL SUMMARY

POL.CD. C42101  CARBON MONOXIDE
                                          AUTOMATED ANALYZERS
             ------------PRECISION---------- ------------------ACCURACY----------------
                                                          -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.    NO.      NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
REGION       ANAL. CHECKS LOW  UP   AUDITS     LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

  01    AVG*   2          -07 +06                      -06 +08 -04 +06 -05 +06
        TOT   37    857                 20

  02    AVG*   9          -09 +06                      -09 +07 -07 +06 -06 +04
        TOT  100    216                 33

  03    AVG*   3          -08 +09                      -12 +13 -06 +07 -05 +04
        TOT  119    648                 60

  04    AVG*   3          -10 +06                      -13 +10 -06 +06 -05 +05 +00 +09
        TOT  271  2.479                292

  05    AVG*   2          -10 +09                      -13 +11 -11 +07 -10 +06
        TOT  102    782                 90

  06    AVG*   3          -09 +11                      -22 +27 -14 +15 -11 +08 -08 +05
        TOT   96    523                 80

  07    AVG*   2          -14 +12                      -16 +11 -09 +09 -12 +11
        TOT   53    315                 29

  08    AVG    2          -08 +01                      -13 +15 -06 +09 -08 +08 -02 +05
        TOT   15    120                 14        5

  09    AVG*   8          -11 +07                      -13 +13 -06 +08 -07 +04 -16 +04
        TOT  270  1.405                133        6

  10    AVG*   6          -07 +04                      -12 +17 -05 +06 -05 +03
        TOT   53    619                 62

NATION  AVG*   4          -10 +08                      -13 +13 -07 +08 -07 +06 -09 +04
        TOT 1.110  8.044               821       11
   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

```
                      ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES                 9
DATE 01/24/83            DATA SELECTED FOR THE YEAR 1981
PROGRAM PA240                                                      FILE NO. PA240R01
                                  REGIONAL SUMMARY

POL.CD. C44201  OZONE
                                          AUTOMATED ANALYZERS
             ------------PRECISION---------- ------------------ACCURACY----------------
                                                          -------PROBABILITY LIMITS------
              NO.  PREC.  PR.LIMS.    NO.      NO.AUDS LEVEL 1 LEVEL 2 LEVEL 3 LEVEL 4
REGION       ANAL. CHECKS LOW  UP   AUDITS     LEVEL 4 LOW  UP LOW  UP LOW  UP LOW  UP

  01    AVG*   5          -11 +10                      -08 +09 -08 +08 -09 +08
        TOT   93    982                 72

  02    AVG*  11          -10 +09                      -13 +09 -10 +09 -10 +10
        TOT  121    380                 58

  03    AVG*   3          -11 +11                      -17 +14 -09 +09 -07 +08 -10 +11
        TOT  231  1.095                172       19

  04    AVG*   3          -11 +09                      -14 +12 -10 +09 -11 +09 -09 +04
        TOT  341  3.295                399        9

  05    AVG*   3          -12 +11                      -16 +13 -10 +09 -09 +08
        TOT  269  1.060                192        1

  06    AVG*   5          -11 +10                      -13 +15 -10 +11 -10 +11 -07 +07
        TOT  218  1.090                204       10

  07    AVG*   3          -15 +15                      -16 +12 -16 +10 -13 +12 -13 +10
        TOT   70    389                 30

  08    AVG    2          -13 +03                      -13 +07 -12 +06 -12 +03
        TOT   29    214                 20        4

  09    AVG*   7          -11 +07                      -17 +09 -11 +09 -10 +04 -09 +03
        TOT  290    933                167      127

  10    AVG*   4          -13 +09                      -14 +12 -10 +11 -09 +09 -03 +01
        TOT   32    295                 39        3

NATION  AVG*   4          -12 +10                      -14 +12 -10 +09 -10 +09 -09 +06
        TOT 1.604 10.455             1.353      179
   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 6. (Continued)

ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES
DATA SELECTED FOR THE YEAR 1981
DATE 01/24/83
PROGRAM PA240
FILE NO. PA240R01
REGIONAL SUMMARY

POL.CD. 42602 NITROGEN DIOXIDE
AUTOMATED ANALYZERS

		PRECISION				ACCURACY		PROBABILITY LIMITS							
		NO. ANAL.	PREC. CHECKS	PR.LIMS. LOW	UP	NO. AUDITS	NO.AUDS LEVEL 4	LEVEL 1 LOW	UP	LEVEL 2 LOW	UP	LEVEL 3 LOW	UP	LEVEL 4 LOW	UP
REGION															
01	AVG	2		-17	+11	6		-35	+17	-24	+10	-17	+08		
	TOT	11	122												
02	AVG*	3		-16	+16	15		-12	+14	-07	+06	-11	+04		
	TOT	20	91												
03	AVG*	3		-11	+12	93		-23	+39	-08	+13	-07	+10		
	TOT	115	949												
04	AVG*	2		-14	+13	50		-18	+20	-13	+15	-14	+10		
	TOT	63	415												
05	AVG*	2		-17	+11	37		-15	+27	-11	+09	-12	+08		
	TOT	41	260												
06	AVG*	3		-13	+07	82	4	-25	+13	-17	+09	-14	+06	-04	+01
	TOT	90	265												
07	AVG	3		-22	+22	1		-08	+21	+05	+09	+06	+08		
	TOT	25	128												
08	AVG*	2		-14	+09	6	4	-52	+67	-23	+16	-05	+12	-01	+04
	TOT	16	94												
09	AVG	5		-12	+10	31	3	-12	+04	-14	+10	-09	+09	+02	+08
	TOT	128	322												
10	AVG	2		-13	+14	4		-13	+06	-08	-02	-04	+01		
	TOT	7	60												
NATION	AVG*	3		-14	+11	331	11	-21	+26	-12	+11	-10	+08	-01	+03
	TOT	314	2,306												

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES
DATA SELECTED FOR THE YEAR 1981
DATE 01/24/83
PROGRAM PA240
FILE NO. PA240R01
REGIONAL SUMMARY

POL.CD. 11101 PARTICULATE
MANUAL METHODS

		PRECISION						ACCURACY	PROBABILITY LIMITS					
		NO. OF SAMPLERS	NO. COLL. SITES	COLL. SAMPS <LIMIT	PR.LIMS. LOW	UP	NO.VAL. COLL.PRS	NO. AUDITS	LEVEL 1 LOW	UP	LEVEL 2 LOW	UP	LEVEL 3 LOW	UP
REGION														
01	AVG	14	2	11	-07	+13	553	334	-07	+07				
	TOT	326	43											
02	AVG*	81	7		-15	+06	481	61	-05	+05				
	TOT	967	86											
03	AVG*	19	2	9	-11	+11	1,729	405	-06	+09				
	TOT	1,207	133											
04	AVG*	20	3	19	-14	+14	3,933	2,102	-07	+08				
	TOT	2,964	343											
05	AVG*	15	2	107	-12	+12	3,319	692	-05	+07				
	TOT	1,842	276											
06	AVG*	29	2	294	-12	+18	660	1,094	-04	+07				
	TOT	872	96											
07	AVG*	14	2	4	-15	+19	375	175	-08	+08				
	TOT	495	76											
08	AVG*	6	2	78	-13	+13	777	256	-05	+04				
	TOT	301	71											
09	AVG*	13	3	20	-11	+11	1,066	273	-08	+06				
	TOT	510	110											
10	AVG	13	3	22	-11	+13	400	291	-07	+07				
	TOT	173	38											
NATION	AVG*	18	2	644	-13	+13	13,397	5,371	-06	+07				
	TOT	9,260	1,274											

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES
DATE 01/24/83
DATA SELECTED FOR THE YEAR 1981
PROGRAM PA240
FILE NO. PA240R01
REGIONAL SUMMARY

POL.CD. 112128 LEAD

MANUAL METHODS

		PRECISION						ACCURACY					
								PROBABILITY LIMITS					
		NO. OF	NO. COLL.	COLL. SAMPS	PR.LIMS.		NO.VAL.	NO.	LEVEL 1		LEVEL 2		LEVEL 3	
REGION		SAMPLERS	SITES	<LIMIT	LOW	UP	COLL.PRS	AUDITS	LOW	UP	LOW	UP	LOW	UP
01	AVG*	2	1		-09	+17			-10	+02	-10	+01	-11	+00
	TOT	7	4	1			34	26						
03	AVG	2	1		-33	+39			-04	+04	-02	-01		
	TOT	4	2				32	3						
04	AVG*	8	2		-25	+27			-07	+08	-03	+03	-06	+06
	TOT	105	26	42			236	506						
05	AVG								-22	+07	-13	+02		
	TOT							16						
07	AVG	10	1		-06	+04			-22	+18	-35	+07	-31	+07
	TOT	10	1	4			16	10						
08	AVG*	5	2		-25	+25							-07	+03
	TOT	10	6	57			77	4						
09	AVG	33	2		-46	+71								
	TOT	132	8	19										
10	AVG	7	1		-16	+09					-02	+01		
	TOT	13	2				19	4						
NATION	AVG*	10	2		-25	+30			-12	+08	-09	+02	-12	+04
	TOT	286	49	123			432	577						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES
DATE 01/24/83
DATA SELECTED FOR THE YEAR 1981
PROGRAM PA240
FILE NO. PA240R01
REGIONAL SUMMARY

POL.CD. 142401 SULFUR DIOXIDE

MANUAL METHODS

		PRECISION						ACCURACY					
								PROBABILITY LIMITS					
		NO. OF	NO. COLL.	COLL. SAMPS	PR.LIMS.		NO.VAL.	NO.	LEVEL 1		LEVEL 2		LEVEL 3	
REGION		SAMPLERS	SITES	<LIMIT	LOW	UP	COLL.PRS	AUDITS	LOW	UP	LOW	UP	LOW	UP
03	AVG								-11	+16				
	TOT							2						
04	AVG*	16	3		-61	+64			-10	+09	-10	+07	-08	+07
	TOT	521	105	962			851	379						
05	AVG	19	3		-42	+64			-12	+09	-09	+07	-06	+05
	TOT	106	29	290			37	185						
06	AVG*	6	1		-08	+24			-17	+07	-08	+08	-06	+06
	TOT	30	5	37			19	39						
07	AVG								-26	+23	-17	+12	-15	+12
	TOT							45						
09	AVG*	8	2		-29	+13			-04	+04	-02	+02	-01	+02
	TOT	32	8	49			62	61						
NATION	AVG*	14	3		-51	+57			-16	+09	-09	+07	-08	+06
	TOT	689	138	1,299			965	711						

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 6. (Continued)

```
                     ANNUAL REPORT OF PRECISION/ACCURACY AVERAGES
DATE 01/24/83           DATA SELECTED FOR THE YEAR 1981
PROGRAM PA240                                                     FILE NO. PA240R01
                                   REGIONAL SUMMARY

POL.CD. I42602  NITROGEN DIOXIDE

                                        MANUAL METHODS
          -----------PRECISION---------- ----------------ACCURACY---------------
                    NO.   COLL.                                --PROBABILITY LIMITS---
          NO. OF   COLL.  SAMPS  PR.LIMS. NO.VAL.     NO. LEVEL 1 LEVEL 2 LEVEL 3
REGION    SAMPLERS SITES <LIMIT LOW  UP COLL.PRS  AUDITS LOW  UP LOW  UP LOW  UP

 03       AVG*  8     2          -11 +11                  -04 +06 -05 +03 -05 +04
          TOT    8     2                      15      32

 04       AVG*  13    3          -36 +42                  -07 +10 -04 +06 -04 +06
          TOT  542   117    711            1.080     427

 05       AVG*  16    4          -60 +60                  -06 +13 -03 +07 -02 +05
          TOT  112    25     81              204     174

 06       AVG*  15    2          -59 +45                  -08 +11 -04 +06 -06 +07
          TOT   90    10     41               78      90

 07       AVG                                             -04 +05 -05 +03 -04 +03
          TOT                                         46


NATION    AVG*  14    3          -41 +44                  -07 +10 -04 +06 -04 +05
          TOT  752   154    833            1.377     769

    * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

TABLE 7. PERFORMANCE AUDIT AND ACCURACY DATA FROM PARS SUMMARIZED BY STATE

```
ENVIRONMENTAL PROTECTION AGENCY               EMSL PRECISION/ACCURACY REPORTING SYSTEM
                        COMPARISON REPORT OF OADMS ACCURACY AUDITS & PARS
DATE  7/29/83                      DATA SELECTED FOR YEAR 1981
REGION  01  STATE  07  CONNECTICUT                           REP ORG  001  LAB  306001
                       -----------------PROBABILITY LIMITS-----------------
  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP
311101 HIV      10     TOTAL          -20    +22
   PARS       ( 207)                ( -8) ( +3)
REGION  01  STATE  20  MAINE                                 REP ORG  001  LAB  301001
                       -----------------PROBABILITY LIMITS-----------------
  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP
311101 HIV      45     TOTAL           -5     +4
   PARS       (  11)                ( -4) ( +7)
REGION  01  STATE  22  MASSACHUSETTS                         REP ORG  001  LAB  304001
                       -----------------PROBABILITY LIMITS-----------------
  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP
C42101 CO       30      -4     +3      -4     +2      -3     +3
   PARS       (   8)  ( -6) ( +9)   ( -6) ( +8)   ( -7) (+11)
REGION  01  STATE  41  RHODE ISLAND                          REP ORG  001  LAB  305001
                       -----------------PROBABILITY LIMITS-----------------
  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP
C42101 CO       12     -11     +5      -2     +4      -5     +7
   PARS       (  10)  ( -5) ( +9)   ( -2) ( +5)   ( -3) ( +5)
312128 LEAD     12     -84     +3     -10     +0     -12     +3
   PARS       (  26)  (-11) ( +3)   ( -9) ( +0)
311101 HIV      12     TOTAL           -6     +6
   PARS       (  23)                ( -6) ( +5)
REGION  01  STATE  47  VERMONT                               REP ORG  001  LAB  303001
                       -----------------PROBABILITY LIMITS-----------------
  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP
C42101 CO        6      -4     -4     -37    +62     -62    +28
   PARS       (   2)  ( -9) ( +1)   ( -3) ( +3)   ( -5) ( +5)
311101 HIV      42     TOTAL           -4     +3
   PARS       (  23)                ( -3) ( +4)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
                                     REGION AVERAGES

  REGION  01

                         ----------------PROBABILITY LIMITS----------------

   POL.CD.     AUDITS     LEVEL 1        LEVEL 2         LEVEL 3        LEVEL 4
                         LOW    UP     LOW    UP      LOW    UP      LOW    UP

  C42101 CO      48       -6     +4    -16    +19     -19    +15
     PARS      (  20)   ( -7) ( +9)  ( -4) ( +6)   ( -5) ( +7)

  I12128 LEAD    12      -14     +3    -10     +0     -12     +3
     PARS      (  26)   (-11) ( +3)  ( -9) ( +0)

  I11101 HIV    109      TOTAL          -6     +7
     PARS      ( 264)                ( -9) ( +4)


     REGION  02  STATE  31  NEW JERSEY                     REP ORG  001  LAB  308001

                         ----------------PROBABILITY LIMITS----------------

     POL.CD.     AUDITS     LEVEL 1      LEVEL 2      LEVEL 3      LEVEL 4
                           LOW   UP     LOW   UP     LOW   UP     LOW   UP

     C42101 CO      87      +0    +5     -3    +5     -3    +3
        PARS      (   8)  (-10) (+14)  ( -6) ( +5)  ( -6) ( +5)

     I11101 HIV     27     TOTAL         -6    +9
        PARS      (  10)               ( -6) ( +1)

     REGION  02  STATE  33  NEW YORK                       REP ORG  001  LAB  307001

                         ----------------PROBABILITY LIMITS----------------

     POL.CD.     AUDITS     LEVEL 1      LEVEL 2      LEVEL 3      LEVEL 4
                           LOW   UP     LOW   UP     LOW   UP     LOW   UP

     C42101 CO      24      -2    +7     -1    +5     +0    +4
        PARS      (  25)  (-12) ( +6)  ( -6) ( +6)  ( -6) ( +4)

     REGION  02  STATE  40  PUERTO RICO                    REP ORG  001  LAB  309001

                         ----------------PROBABILITY LIMITS----------------

     POL.CD.     AUDITS     LEVEL 1      LEVEL 2      LEVEL 3      LEVEL 4
                           LOW   UP     LOW   UP     LOW   UP     LOW   UP

     I11101 HIV     30     TOTAL        -26   +51
        PARS      (  28)               ( -6) ( +7)


                                     REGION AVERAGES

  REGION  02

                         ----------------PROBABILITY LIMITS----------------

   POL.CD.     AUDITS     LEVEL 1        LEVEL 2         LEVEL 3        LEVEL 4
                         LOW    UP     LOW    UP      LOW    UP      LOW    UP

  C42101 CO     111       -1     +5     -3     +5      -2     +4
     PARS      (  33)   (-12) ( +9)  ( -6) ( +5)   ( -6) ( +5)

  I11101 HIV     57      TOTAL         -25    +37
     PARS      (  36)                ( -7) ( +6)


      * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
     REGION  03  STATE  06  DELAWARE                            REP ORG  001  LAB  313002

                        -----------------PROBABILITY LIMITS-----------------

      POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                             LOW    UP      LOW    UP      LOW    UP      LOW    UP

     C42101 CO       12       -2    +16     +0     +4      -6     +6
        PARS       (  5)   (-12) ( +6)   ( -5) ( +3)   ( -6) ( +2)

     I12128 LEAD     12      -30     -1     -15    -10     -18    -10
        PARS       (  3)   ( -5) ( +5)   ( -4) ( +1)

     REGION  03  STATE  21  MARYLAND                            REP ORG  001  LAB  312001

                        -----------------PROBABILITY LIMITS-----------------

      POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                             LOW    UP      LOW    UP      LOW    UP      LOW    UP

     C42101 CO       29       -3     +7      -2     +6      -8     +7
        PARS       ( 16)   (-19) (+17)   (-11) (+18)   ( -8) (+11)

     I11101 HIV     102      TOTAL           -7    +11
        PARS       ( 49)                 (-10) (+11)

     REGION  03  STATE  21  MARYLAND                            REP ORG  003  LAB  412004

                        -----------------PROBABILITY LIMITS-----------------

      POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                             LOW    UP      LOW    UP      LOW    UP      LOW    UP

     I11101 HIV      15      TOTAL          +24    +90
        PARS       ( 14)                 (-11) (+17)

     REGION  03  STATE  21  MARYLAND                            REP ORG  006  LAB  412006

                        -----------------PROBABILITY LIMITS-----------------

      POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                             LOW    UP      LOW    UP      LOW    UP      LOW    UP

     I11101 HIV      21      TOTAL          -16    +21
        PARS       ( 13)                 ( -9) (+14)

     REGION  03  STATE  39  PENNSYLVANIA                        REP ORG  001  LAB  311002

                        -----------------PROBABILITY LIMITS-----------------

      POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                             LOW    UP      LOW    UP      LOW    UP      LOW    UP

     I11101 HIV      30      TOTAL          -17    +30
        PARS       ( 47)                 ( -6) (+10)

     REGION  03  STATE  39  PENNSYLVANIA                        REP ORG  002  LAB  411002

                        -----------------PROBABILITY LIMITS-----------------

      POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                             LOW    UP      LOW    UP      LOW    UP      LOW    UP

     C42101 CO       21       -3     +6      -4     +4      -2     +6
        PARS       ( 22)   (-13) ( +7)   ( -7) ( +0)   ( -2) ( +1)

     I11108 HIV      46      TOTAL           -1     +8
        PARS       (102)                 ( -2) ( +2)


     * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
REGION  03  STATE  39  PENNSYLVANIA                         REP ORG  003  LAB  411001

                   ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO        24      -8     +6      -3     +6      -6     +6
   PARS       (   4)  (-13) ( +9)    ( -2) ( +2)    ( -3) ( +1)

311101 HIV        9      TOTAL          -19    +39
   PARS       (  17)                 (-10) (+12)

REGION  03  STATE  48  VIRGINIA                             REP ORG  001  LAB  315001

                   ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO        33      -1     +6      +0     +3      +0     +1
   PARS       (   9)  ( -2) ( +5)    ( -2) ( +1)    ( -2) ( +1)

311101 HIV       45      TOTAL          -6     +6
   PARS       (  50)                 ( -5) ( +3)

REGION  03  STATE  48  VIRGINIA                             REP ORG  002  LAB  415005

                   ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

311101 HIV       18      TOTAL          -14    -1
   PARS       (  12)                 ( +0) (+11)

REGION  03  STATE  48  VIRGINIA                             REP ORG  003  LAB  415004

                   ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO        24      -8    +14      -9    +14      -6     +9
   PARS       (   5)  ( -3) ( +5)    ( -3) ( +6)    ( -5) ( +5)

342602 NO2       10     -10    +13      -9    +14      +1     +6      +0     +6
   PARS       (  32)  ( -6) ( +8)    ( -5) ( +3)    ( -6) ( +3)

311101 HIV       15      TOTAL          -2     +0
   PARS       (  21)                 ( -9) ( +7)

REGION  03  STATE  48  VIRGINIA                             REP ORG  005  LAB  415001

                   ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

311101 HIV       12      TOTAL          -14    +1
   PARS       (   6)                 ( -6) ( +3)

REGION  03  STATE  50  WEST VIRGINIA                        REP ORG  001  LAB  714001

                   ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

311101 HIV       24      TOTAL          -7    +12
   PARS       (  12)                 (-10) ( +3)

    * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
REGION  03  STATE  50  WEST VIRGINIA                    REP ORG  002  LAB  314002

                  -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

311101 HIV      12       TOTAL          -2     +3
   PARS      (   2)                   ( +0) ( +2)


                              REGION AVERAGES

  REGION  03

                  -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

E42101 CO      143       -6     +8      -4     +7      -5     +5
   PARS      (  61)    (-13) (+10)    ( -9) ( +8)    ( -5) ( +5)

342602 NO2      10      -10    +13      -9    +16      +1     +6      +0     +4
   PARS      (  32)    ( -6) ( +6)    ( -5) ( +3)    ( -4) ( +3)

312128 LEAD     12      -30     -1     -15    -10     -18    -10
   PARS      (   3)    ( -5) ( +5)    ( -4) ( +1)

311101 HIV     351       TOTAL         -23    +32
   PARS      ( 345)                   ( -7) ( +9)


REGION  04  STATE  01  ALABAMA                          REP ORG  011  LAB  319001

                  -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

311101 HIV       5       TOTAL         -17    +13
   PARS      (  45)                   ( -6) ( +9)

REGION  04  STATE  01  ALABAMA                          REP ORG  012  LAB  419001

                  -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO       24       -6     +6      -3     +5      -1     +2
   PARS      (   8)    ( -9) ( +9)    ( -4) ( +4)    ( -3) ( +3)

REGION  04  STATE  01  ALABAMA                          REP ORG  014  LAB  419004

                  -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS      LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

342602 NO2      10      -47    +21      -7     +6     -39    +12      -1     +3
   PARS      (  12)    ( -5) ( +5)    ( -2) ( +3)    ( -3) ( +6)

342401 SO2       5       -6     -6     -16     -5      -2     -2      -2     -2
   PARS      (   5)    ( -9) ( +3)    ( -6) ( +3)    ( -4) ( +6)


   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
REGION  04  STATE  10  FLORIDA                              REP ORG  001  LAB  323005

                    ----------------PROBABILITY LIMITS-----------------

  POL.CD.    AUDITS    LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

342602 NO2     10     -19    +17      +1     +4      +1     +2      -1     +6
   PARS      (  12)  ( -1) ( +5)    ( -1) ( +4)    ( -1) ( +5)

342401 SO2      9      -2     +2      -2    +11      -1    +10      -8    +15
   PARS      (  12)  (-17) (+20)    ( -4) ( +3)    ( -3) ( +3)

311101 HIV     36     TOTAL           -6     +2
   PARS      (  11)                 ( -6) ( +4)

REGION  04  STATE  10  FLORIDA                              REP ORG  003  LAB  323006

                    ----------------PROBABILITY LIMITS-----------------

  POL.CD.    AUDITS    LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

311101 HIV     34     TOTAL          -18     -5
   PARS      (  25)                 ( -5) ( +4)

REGION  04  STATE  10  FLORIDA                              REP ORG  004  LAB  323008

                    ----------------PROBABILITY LIMITS-----------------

  POL.CD.    AUDITS    LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

342602 NO2      5     -16    -16     -14    -14      -9     -3      -1     -1
   PARS      (   3)  ( -8) ( +6)    ( -5) ( +9)    ( +1) ( +4)

311101 HIV      6     TOTAL          -73    +31
   PARS      (   5)                 ( -4) (+14)

REGION  04  STATE  10  FLORIDA                              REP ORG  005  LAB  323002

                    ----------------PROBABILITY LIMITS-----------------

  POL.CD.    AUDITS    LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

342602 NO2     10      -3     +2      -1     +0      -5     +4      -2     -1
   PARS      (   3)  ( -2) ( +4)    ( -3) ( +7)    ( +1) ( +1)

342401 SO2      4                    -20     -7     -18    -18     -11    -11
   PARS      (   3)  ( -2) (+12)    ( -7) (+19)    ( +0) ( +2)

REGION  04  STATE  10  FLORIDA                              REP ORG  006  LAB  323006

                    ----------------PROBABILITY LIMITS-----------------

  POL.CD.    AUDITS    LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                      LOW    UP      LOW    UP      LOW    UP      LOW    UP

342602 NO2     10     -47    +81      -8     +6      -6     +6      -5     +4
   PARS      (   3)  ( +0) ( +0)    ( +0) ( +2)    ( +0) ( +2)

342401 SO2      9      -7     +3     -14     +1     -11     -1      -6     -1
   PARS      (   3)  ( -4) ( +2)    ( -5) ( +1)    ( -6) ( +0)

311101 HIV     28     TOTAL          -15    +23
   PARS      (   2)                 ( -5) ( +5)


  * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
 REGION  04  STATE  10  FLORIDA                        REP ORG  011  LAB  423003

                   ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

 642101 CO      30     -14    +1      -6    +3     -11    +3
    PARS     (  20)   (-15) ( +9)   (-10) ( +6)   (-15) ( +7)

 311101 HIV     33     TOTAL         -10   +10
    PARS     (  63)                 ( -5) ( +8)


 REGION  04  STATE  10  FLORIDA                        REP ORG  012  LAB  423004

                   ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

 642101 CO      30     -13    +8      -6    +4      -7    +5
    PARS     (   5)   (-21) ( +6)   ( -9) ( +9)   ( -5) ( +8)

 142602 NO2     10      -6    +5      -3    -2      -3    -2      -3    -1
    PARS     (   6)   ( -5) ( +1)   ( -1) ( +1)   ( -1) ( +1)

 142401 SO2      9     -14   -14     -54   +22     -12    -3     -12    -9
    PARS     (   7)   (-15) ( +7)   ( -9) ( +5)   ( -9) ( +5)

 112128 LEAD    12     -43   +24      -5    +9      -3    +4
    PARS     (   8)   ( -6) ( +0)   ( +0) ( +2)

 311101 HIV     34     TOTAL          -7   +12
    PARS     (  19)                 ( -2) ( +8)

 REGION  04  STATE  10  FLORIDA                        REP ORG  014  LAB  423005

                   ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

 142401 SO2      9     -34    +6     -22    +5      -4    -4      -9    +8
    PARS     (   8)   (-36) ( -7)   (-21) ( +1)   (-15) ( +3)

 311101 HIV     14     TOTAL          -4    +8
    PARS     (   8)                 ( -6) ( +7)


 REGION  04  STATE  10  FLORIDA                        REP ORG  015  LAB  423015

                   ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

 311101 HIV     15     TOTAL          -2    -1
    PARS     (   5)                 ( -5) ( +5)


  * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
REGION  04  STATE  10  FLORIDA                          REP ORG  017  LAB  423001

                  ----------------PROBABILITY LIMITS----------------

POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      21       -3    -1       -2    +6       -1    +2
   PARS      (  5)    ( -8) (+19)    ( +1) (+11)    ( -1) ( +9)

I42602 NO2     10       -7    -1       -7    -1       -6    +0       -9    +1
   PARS      ( 13)    ( -6) ( +6)    ( -1) ( +1)    ( -3) ( +3)

I42401 SO2      9      -15   -15      -38   +17      -18    +9      -24   +11
   PARS      ( 14)    (-26) ( +6)    (-14) ( +4)    ( -5) ( +5)

I11101 HIV     34     TOTAL            -6    +9
   PARS      ( 11)                   ( -4) ( +4)
```

```
REGION  04  STATE  10  FLORIDA                          REP ORG  018  LAB  423002

                  ----------------PROBABILITY LIMITS----------------

POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      21       -3   +15       +0    +9       -1    +7
   PARS      (  4)    ( -2) (+24)    ( -3) (+23)    ( +0) (+12)

I12128 LEAD    12      -10   +31       +5   +12       +0    +8
   PARS      (  3)    ( +0) ( +6)

I11101 HIV     21     TOTAL            -8   +11
   PARS      ( 69)                   ( -6) ( +8)
```

```
REGION  04  STATE  11  GEORGIA                          REP ORG  010  LAB  321001

                  ----------------PROBABILITY LIMITS----------------

POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      21      -16   +20       -2    +1       -2    +1
   PARS      (  6)    (-12) (+13)    ( -3) ( +4)    ( -4) ( +4)

I42602 NO2     10       -5    +9       -3    +3       -5    +2       -2    +2
   PARS      (  4)    ( -8) ( +6)    ( -4) ( +6)    ( -4) ( +6)

I11101 HIV     24     TOTAL            -8    -4
   PARS      ( 94)                   ( -4) ( +8)
```

```
REGION  04  STATE  18  KENTUCKY                         REP ORG  001  LAB  316001

                  ----------------PROBABILITY LIMITS----------------

POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                       LOW    UP      LOW    UP      LOW    UP      LOW    UP

C42101 CO      15       -8    +6       -3    +3       -1    +2
   PARS      ( 32)    (-14) (+16)    ( -5) ( +7)    ( -6) ( +8)

I42602 NO2      9       +1    +2      -14    +6      -18    +2      -20   +10
   PARS      ( 52)    ( -8) ( +8)    ( -8) ( +6)    ( -9) ( +4)

I42401 SO2      9       -9    +5       -4    +7       -7   +10       -6    +5
   PARS      ( 51)    ( -9) (+12)    ( -7) (+12)    ( -7) (+11)

I11101 HIV     15     TOTAL           -11   +19
   PARS      (128)                   (-19) (+20)
```

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 7. (Continued)

```
 REGION  04  STATE  18  KENTUCKY                              REP ORG  002  LAB  41B001

                  ----------------PROBABILITY LIMITS----------------

 POL.CD.      AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                         LOW    UP       LOW    UP       LOW    UP       LOW    UP

 E42101 CO      21       -13    +3       -3     +8       -3     +7
    PARS      (  6)     (-23) ( +2)    ( -4) ( +6)     ( -9) (+10)

 342602 NO2     10       -15    +3       -22    +7       -17    +1       -22    -9
    PARS      ( 44)     (-10) (+17)    (-13) (+10)     ( -8) ( +9)

 342401 SO2      9       -93    +22      -32    +10      -32    +13      -22    +2
    PARS      ( 46)     (-44) ( +3)    (-49) (+33)     (-46) (+28)

 311101 NIV     12       TOTAL           -13    +1
    PARS      ( 16)                    ( +0) ( +5)

 REGION  04  STATE  25  MISSISSIPPI                           REP ORG  100  LAB  322001

                  ----------------PROBABILITY LIMITS----------------

 POL.CD.      AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                         LOW    UP       LOW    UP       LOW    UP       LOW    UP

 E42101 CO       6        -2    -2       -1     +8       -2     +10
    PARS      (  6)     ( -6) ( +4)    ( -4) ( +7)     ( -2) ( +3)

 REGION  04  STATE  34  NORTH CAROLINA                        REP ORG  001  LAB  31R001

                  ----------------PROBABILITY LIMITS----------------

 POL.CD.      AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                         LOW    UP       LOW    UP       LOW    UP       LOW    UP

 E42101 CO      12        -7    +1       -1     +6       +0     +2
    PARS      (  9)     (-19) (+10)    ( -9) ( +2)     ( -7) ( +3)

 342602 NO2     10        -2    +5       -3     +3       -2     +2       -3     +1
    PARS      ( 95)     ( -9) ( +7)    ( -4) ( +6)     ( -4) ( +3)

 342401 SO2      9       -64    +47      -6     -2       -6     +2       -3     -3
    PARS      ( 95)     ( -6) ( +6)    (-10) ( +5)     ( -5) ( +5)

 312128 LEAD    12        -9    +11      -8     +7       -5     +10
    PARS      (  8)     ( +0) (+12)    ( +0) ( +5)

 REGION  04  STATE  34  NORTH CAROLINA                        REP ORG  002  LAB  41P003

                  ----------------PROBABILITY LIMITS----------------

 POL.CD.      AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                         LOW    UP       LOW    UP       LOW    UP       LOW    UP

 E42101 CO       9        +3    +3       -6     +7       -9     +8
    PARS      (  7)     (-10) ( +8)    ( -7) ( +5)     (-10) ( +7)

 342602 NO2      5       -15    +19      -14    -14      -4     -4       -7     -7
    PARS      ( 42)     (-11) (+10)    (-11) ( +9)     (-10) ( +8)

 342401 SO2      9        -2    +0       -13    +12      -14    +20      +0     +0
    PARS      ( 45)     (-27) (+10)    (-18) ( +8)     (-17) ( +8)

 311101 NIV     18       TOTAL           -65    +24
    PARS      ( 21)                    (-22) (+17)

         * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
 REGION  04  STATE  34  NORTH CAROLINA                      REP ORG  003  LAB  418006

                       ----------------PROBABILITY LIMITS-----------------

  POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

 $42101 CO       30       -6    +2       -2    +3       -1    +3
    PARS      (  35)   ( -7) ( +3)   ( -2) ( +2)   ( -2) ( +2)

 $42602 NO2      10       -3    +0       -6    -1       -3    -1       -3    -2
    PARS      (  39)   ( -4) ( +8)   ( +0) ( +5)   ( -2) ( +5)

 $42401 SO2       9      -26   -11      -14    -1       -5    -5      -26   +15
    PARS      (  37)   (-13) ( +0)   ( -6) ( +2)   ( -6) ( +3)

 $11101 HIV      69     TOTAL            -6    +6
    PARS      (  54)                 ( -5) ( +5)


 REGION  04  STATE  34  NORTH CAROLINA                      REP ORG  004  LAB  418008

                       ----------------PROBABILITY LIMITS-----------------

  POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

 $42602 NO2      10      -23    +4      -14    +1       -8    -6       -9    -5
    PARS      (  12)   ( -6) (+15)   ( -4) ( +6)   ( -5) (+10)

 $42401 SO2       9      -46   +41      -76   +86      -15   -15      -54   +59
    PARS      (  12)   (-25) (+16)   (-14) ( +7)   (-15) ( +8)

 $11101 HIV      13     TOTAL            +1   +27
    PARS      (  13)                 (-16) (+14)

 REGION  04  STATE  42  SOUTH CAROLINA                      REP ORG  001  LAB  320001

                       ----------------PROBABILITY LIMITS-----------------

  POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

 $42101 CO       18       -7    +5       -4    +5       -1    +3
    PARS      (  26)   (-17) (+11)   ( -5) ( +6)   ( -4) ( +6)

 $42602 NO2      10      -15    -1       -9    -7      -10    -6      -16    +7
    PARS      (  20)   (-15) (+17)   ( -1) ( +2)   ( -7) ( +4)

 $12128 LEAD     12       -3    +2       +0    +1       -4    +2
    PARS      ( 427)                 ( -2) ( +2)

 $11101 HIV       6     TOTAL            -4    +0
    PARS      ( 427)                 ( -2) ( +2)


 REGION  04  STATE  44  TENNESSEE                           REP ORG  001  LAB  317001

                       ----------------PROBABILITY LIMITS-----------------

  POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                         LOW    UP      LOW    UP      LOW    UP      LOW    UP

 $11101 HIV       6     TOTAL            -2    +3
    PARS      ( 220)                 ( -6) ( +9)


         * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
 REGION  04  STATE  44  TENNESSEE                           REP ORG  002  LAB  417004

                          ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW    UP

 C42101 CO       12                      -1     +5       -2     +3
    PARS      (  26)   ( -9) ( +8)     ( -4) ( +4)     ( -5) ( +3)

 REGION  04  STATE  44  TENNESSEE                           REP ORG  003  LAB  417003

                          ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW    UP

 C42101 CO       30      +2     +5       +0     +6       -1     +1
    PARS      (  21)   (-15) ( +3)     ( -9) ( +5)     ( -7) ( +6)

 342602 NO2      10      -9     -5      -10     -5      -13     -1      -11     -2
    PARS      (  46)   ( -8) ( +6)     ( -5) ( +6)     ( -6) ( +3)

 312128 LEAD     12     +14    +15      +15     +6       -8     -1
    PARS      (  60)   (-12) ( +6)     (-13) ( +6)

 311101 HIV      16     TOTAL            -2     +9
    PARS      (  68)                   ( -7) ( +8)


 REGION  04  STATE  44  TENNESSEE                           REP ORG  004  LAB  417002

                          ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW    UP

 C42101 CO        3                      -2    +15       +8     +8
    PARS      (   8)   ( -7) ( +8)     ( -7) ( +5)     ( -8) ( +4)

 REGION  04  STATE  44  TENNESSEE                           REP ORG  005  LAB  417001

                          ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW    UP       LOW    UP       LOW    UP       LOW    UP

 C42101 CO        2                      +1     +1       +1     +1
    PARS      (   8)   (-16) ( +8)     ( -5) ( +3)     ( -1) ( +1)

 311101 HIV      17     TOTAL           -10    +11
    PARS      (  99)                   ( -3) ( +3)

      * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
                              REGION AVERAGES
-------------------------------------------------------------------------
 REGION  04
-------------------------------------------------------------------------
                 ----------------PROBABILITY LIMITS----------------
-------------------------------------------------------------------------
  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
-------------------------------------------------------------------------
 C42101 CO      305     -11   +9      -5    +6      -5    +5
    PARS      ( 250)  (-14) (+11)   ( -7) ( +7)   ( -7) ( +6)
-------------------------------------------------------------------------
 342602 NO2     149     -37  +76      -13   +5      -15   +6      -13   +6
    PARS      ( 424)  ( -9) (+10)   ( -6) ( +7)   ( -6) ( +6)
-------------------------------------------------------------------------
 342401 SO2     108     -52  +33      -35  +26      -18  +10      -20  +13
    PARS      ( 358)  (-26) (+15)   (-21) (+15)   (-18) (+14)
-------------------------------------------------------------------------
 312128 LEAD     60     -21  +22      -10  +12       -7   +8
    PARS      ( 306)  (-11) ( +8)   ( -5) ( +4)
-------------------------------------------------------------------------
 311101 HIV     456     TOTAL         -18  +16
    PARS      (1405)                ( -8) ( +9)
-------------------------------------------------------------------------

 REGION  05  STATE  14  ILLINOIS                  REP ORG  001  LAB  428001
-------------------------------------------------------------------------
                 ----------------PROBABILITY LIMITS----------------
-------------------------------------------------------------------------
  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
-------------------------------------------------------------------------
 C42101 CO       42     -13  +15       -6   +9       -6   +9
    PARS      (   4)  ( -8) ( -5)   ( -6) ( -1)   ( -3) ( +0)
-------------------------------------------------------------------------
 REGION  05  STATE  14  ILLINOIS                  REP ORG  003  LAB  428003
-------------------------------------------------------------------------
                 ----------------PROBABILITY LIMITS----------------
-------------------------------------------------------------------------
  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
-------------------------------------------------------------------------
 C42101 CO       18     -13   +2       -8  +11       -7   +9
    PARS      (   4)  ( -4) ( +1)   ( -4) ( +7)   ( -8) ( +7)
-------------------------------------------------------------------------
 311101 HIV      12     TOTAL         -19  +15
    PARS      (   6)                ( -2) ( +3)
-------------------------------------------------------------------------
 REGION  05  STATE  15  INDIANA                   REP ORG  003  LAB  429007
-------------------------------------------------------------------------
                 ----------------PROBABILITY LIMITS----------------
-------------------------------------------------------------------------
  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
-------------------------------------------------------------------------
 311101 HIV      27     TOTAL         +12  +24
    PARS      (   6)                ( -5) ( +5)
-------------------------------------------------------------------------

-------------------------------------------------------------------------
 REGION  05  STATE  15  INDIANA                   REP ORG  004  LAB  429003
-------------------------------------------------------------------------
                 ----------------PROBABILITY LIMITS----------------
-------------------------------------------------------------------------
  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
-------------------------------------------------------------------------
 311101 HIV       9     TOTAL         -20  +26
    PARS      (   6)                ( -3) ( +5)
-------------------------------------------------------------------------

-------------------------------------------------------------------------
   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
-------------------------------------------------------------------------
```

(Continued)

TABLE 7. (Continued)

```
REGION  05  STATE  15  INDIANA                          REP ORG  005  LAB  429005

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

111101 HIV     30      TOTAL         -12    +11
   PARS      (  16)                 ( -5) ( +7)

REGION  05  STATE  15  INDIANA                          REP ORG  007  LAB  429006

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

111101 HIV     15      TOTAL          -9    +28
   PARS      (   8)                 ( -4) ( +5)

REGION  05  STATE  15  INDIANA                          REP ORG  008  LAB  429004

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

111101 HIV     12      TOTAL          -5     +2
   PARS      (  17)                 ( -2) ( +2)

REGION  05  STATE  15  INDIANA                          REP ORG  009  LAB  429006

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

111101 HIV     18      TOTAL         -10     +6
   PARS      (   8)                 ( -1) ( +1)

REGION  05  STATE  23  MICHIGAN                         REP ORG  001  LAB  326001

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

111101 HIV     30      TOTAL         -16    +18
   PARS      (  21)                 ( -8) (+12)

REGION  05  STATE  23  MICHIGAN                         REP ORG  007  LAB  426001

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

642101 CO      30      -11    +5      -4     +4     -6     +5
   PARS      (   3)  ( -2) ( +6)  ( -4) ( +4)  ( -6) ( +3)

111101 HIV     54      TOTAL          -4     +3
   PARS      (  26)                 ( -4) ( +7)

REGION  05  STATE  24  MINNESOTA                        REP ORG  001  LAB  324001

                    ----------------PROBABILITY LIMITS----------------

 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                       LOW    UP     LOW    UP     LOW    UP     LOW    UP

642101 CO      42      -16    +8      -6     +9     -3     +4
   PARS      (  16)  (-12) (+12)  ( -4) ( +4)  ( -3) ( +3)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
REGION  05  STATE  36  OHIO                          REP ORG  001  LAB  327002

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

311101 HIV       9      TOTAL         -14    +5
   PARS      (  17)                  ( -9) ( +6)

REGION  05  STATE  36  OHIO                          REP ORG  002  LAB  327003

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

311101 HIV      33      TOTAL         -17    +2
   PARS      (  14)                  ( -6) ( +7)

REGION  05  STATE  36  OHIO                          REP ORG  003  LAB  327005

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

311101 HIV      21      TOTAL          -8    +0
   PARS      (  17)                  ( -6) ( +6)

REGION  05  STATE  36  OHIO                          REP ORG  005  LAB  327006

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

311101 HIV      21      TOTAL         -12    +7
   PARS      (   9)                  ( -9) ( +7)

REGION  05  STATE  36  OHIO                          REP ORG  006  LAB  427001

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO        6       -3    +7      -2    -1      -2    +0
   PARS      (   4)   (-11) (+19)   ( -5) ( +7)   ( -5) ( +6)

311101 HIV      46      TOTAL          -9    +9
   PARS      (  18)                  ( -6) (+10)

REGION  05  STATE  36  OHIO                          REP ORG  007  LAB  427002

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

311101 HIV      57      TOTAL          -4    +3
   PARS      (  16)                  ( -2) ( +5)

REGION  05  STATE  36  OHIO                          REP ORG  008  LAB  427003

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO       27      -31   +13      -7    +6      -8    +8
   PARS      (   7)   (-14) ( +7)   ( -5) ( +4)   ( -9) ( +4)

311101 HIV      45      TOTAL          -8    +9
   PARS      (  41)                  ( -2) ( +5)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

REGION 05 STATE 36 OHIO REP ORG 009 LAB 427004

POL.CD.	AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
		PROBABILITY LIMITS							
C42101 CO	12	-38	+13	-16	+12	-20	+13		
PARS	(4)	(-15)	(+6)	(-32)	(+19)	(-34)	(+21)		
342602 NO2	10	-5	+5	-5	+2	-3	+1	-2	+0
PARS	(67)	(-6)	(+16)	(-5)	(+8)	(-1)	(+5)		
342401 SO2	9	-9	+19	-14	+5	-7	+15	-3	+0
PARS	(68)	(-7)	(+2)	(-5)	(+2)	(-2)	(+2)		
311101 HIV	35	TOTAL		-13	+8				
PARS	(33)			(-8)	(+9)				

REGION 05 STATE 36 OHIO REP ORG 010 LAB 427005

POL.CD.	AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
		PROBABILITY LIMITS							
C42101 CO	12	-17	-9	-13	+0	-10	+2		
PARS	(2)	(-1)	(+9)	(-22)	(+24)	(-24)	(+22)		
342602 NO2	10	-9	+3	-10	+5	-5	+2	-3	-2
PARS	(61)	(-7)	(+20)	(-2)	(+9)	(-2)	(+5)		
342401 SO2	9	-16	-6	-14	+4	-11	+5	-40	+12
PARS	(60)	(-20)	(+21)	(-11)	(+12)	(-8)	(+8)		
311101 HIV	15	TOTAL		-16	+16				
PARS	(32)			(-11)	(+13)				

REGION 05 STATE 36 OHIO REP ORG 012 LAB 427007

POL.CD.	AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
		PROBABILITY LIMITS							
342602 NO2	10	-4	-1	-7	+1	-7	+7	-5	+1
PARS	(46)	(-10)	(+7)	(-3)	(+5)	(-2)	(+4)		
342401 SO2	9	-17	+4	-16	+3	-18	+5	-13	-3
PARS	(57)	(-11)	(+6)	(-10)	(+5)	(-7)	(+4)		
311101 HIV	48	TOTAL		-20	+10				
PARS	(15)			(-12)	(+11)				

REGION 05 STATE 36 OHIO REP ORG 013 LAB 427010

POL.CD.	AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
		PROBABILITY LIMITS							
311101 HIV	21	TOTAL		-6	+10				
PARS	(21)			(-2)	(+10)				

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 7. (Continued)

```
REGION  05  STATE  36  OHIO                          REP ORG  014  LAB  427008

                 ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO        6      +0     +0     -8     +6     -5     +2
   PARS      (   2)  ( -2) ( +4)  ( -5) ( +1)  ( -8) ( +6)

311101 HIV      18     TOTAL         -17    +15
   PARS      (  19)                ( -6) ( +5)

REGION  05  STATE  36  OHIO                          REP ORG  015  LAB  427009

                 ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO       12     -12     +4     -4     +2     -2     +4
   PARS      (   4)  (-13) ( +6)  (-14) ( +9)  ( -9) ( +3)

311101 HIV      26     TOTAL          -6     +9
   PARS      (  19)                ( -5) (+19)


REGION  05  STATE  36  OHIO                          REP ORG  016  LAB  427012

                 ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

311101 HIV      30     TOTAL         +12    +19
   PARS      (  18)                ( -2) ( +4)

REGION  05  STATE  51  WISCONSIN                     REP ORG  001  LAB  325001

                 ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

311101 HIV      33     TOTAL          -9     +7
   PARS      (  17)                ( -1) ( +1)

                              REGION AVERAGES

REGION  05

                 ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW    UP     LOW    UP     LOW    UP     LOW    UP

C42101 CO      207     -19    +10     -6     +8     -7     +7
   PARS      (  50)  (-16) (+14)  (-11) (+10)  (-11) ( +6)

342602 NO2      30      -7     +3     -7     +2     -5     +3     -4     +0
   PARS      ( 174)  ( -9) (+17)  ( -4) ( +8)  ( -2) ( +5)

342401 SO2      27     -21    +12    -14     +3    -16    +11    -24     +8
   PARS      ( 185)  (-15) (+11)  ( -9) ( +7)  ( -6) ( +5)

311101 HIV     663     TOTAL         -15    +16
   PARS      ( 420)                ( -7) ( +9)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
REGION  06  STATE  04  ARKANSAS                      REP ORG  007  LAB  332001

                  ----------------PROBABILITY LIMITS----------------
 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
342401 SO2      4       +0    +0      +2    +3      -4    -4
   PARS     (  10)                  ( +0) ( +3)

REGION  06  STATE  19  LOUISIANA                     REP ORG  001  LAB  334001

                  ----------------PROBABILITY LIMITS----------------
 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
342602 NO2     15       -6    +6      -5    +6      -3    +4      -2    +2
   PARS     (  30)    ( -5) ( +4)   ( -6) ( +1)   ( -1) ( +1)

REGION  06  STATE  32  NEW MEXICO                    REP ORG  002  LAB  430001

                  ----------------PROBABILITY LIMITS----------------
 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
311101 HIV      3       TOTAL         -6    -4
   PARS     (  18)                  (-10) ( +1)

REGION  06  STATE  37  OKLAHOMA                      REP ORG  103  LAB  431002

                  ----------------PROBABILITY LIMITS----------------
 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
E42101 CO       3                     -25   -24     -25   -25
   PARS     (   6)    ( +0) (+26)   ( +2) ( +5)   ( -2) ( +4)
311101 HIV     27       TOTAL         -15   +8
   PARS     (  18)                  (-32) (+20)

REGION  06  STATE  45  TEXAS                         REP ORG  001  LAB  333001

                  ----------------PROBABILITY LIMITS----------------
 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
E42101 CO      36       -8    +5      -10   +6      -7    +7
   PARS     (  42)    (-21) (+23)   (-11) (+13)   (-16) (+22)

REGION  06  STATE  45  TEXAS                         REP ORG  002  LAB  433002

                  ----------------PROBABILITY LIMITS----------------
 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
311101 HIV     30       TOTAL         -5    +5
   PARS     (  34)                  ( -4) ( +3)

REGION  06  STATE  45  TEXAS                         REP ORG  003  LAB  433001

                  ----------------PROBABILITY LIMITS----------------
 POL.CD.     AUDITS     LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                        LOW   UP      LOW   UP      LOW   UP      LOW   UP
E42101 CO       6       -2    -2      -1    +3      -1    +5
   PARS     (   2)    ( -4) (+10)   (-14) ( +8)   ( +1) ( +1)
311101 HIV     57       TOTAL         -13   +5
   PARS     (  30)                  ( -5) ( +6)

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

REGION 06 STATE 45 TEXAS REP ORG 004 LAB 433006

-----------------PROBABILITY LIMITS-----------------

POL.CD.	AUDITS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
		LOW	UP	LOW	UP	LOW	UP	LOW	UP
I11101 HIV	6	TOTAL		-12	+4				
PARS	(22)			(-4)	(+11)				

REGION 06 STATE 45 TEXAS REP ORG 005 LAB 433005

-----------------PROBABILITY LIMITS-----------------

POL.CD.	AUDITS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
		LOW	UP	LOW	UP	LOW	UP	LOW	UP
I42602 NO2	10	-10	+22	-1	+10	+0	+5	-4	+8
PARS	(31)	(-8)	(+11)	(-5)	(+8)	(-7)	(+7)		
I42401 SO2	9	-85	-15	-21	+4	-19	+10	-10	+8
PARS	(26)	(-25)	(+13)	(-18)	(+15)	(-16)	(+10)		
I11101 HIV	33	TOTAL		-12	+5				
PARS	(30)			(-5)	(+2)				

REGION 06 STATE 45 TEXAS REP ORG 006 LAB 433008

-----------------PROBABILITY LIMITS-----------------

POL.CD.	AUDITS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
		LOW	UP	LOW	UP	LOW	UP	LOW	UP
I42602 NO2	10	-4	+16	+14	+14	+1	+17	+3	+8
PARS	(3)	(-7)	(+15)	(-3)	(+7)	(-11)	(+19)		

REGION AVERAGES

REGION 06

-----------------PROBABILITY LIMITS-----------------

POL.CD.	AUDITS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
		LOW	UP	LOW	UP	LOW	UP	LOW	UP
E42101 CO	45	-7	+5	-16	+12	-16	+13		
PARS	(50)	(-21)	(+26)	(-11)	(+13)	(-16)	(+21)		
I42602 NO2	35	-8	+15	-7	+16	-5	+11	-3	+8
PARS	(84)	(-7)	(+9)	(-5)	(+6)	(-6)	(+6)		
I42401 SO2	13	-28	+13	-19	+10	-14	+6	-10	+8
PARS	(36)	(-25)	(+13)	(-14)	(+13)	(-10)	(+10)		
I11101 HIV	156	TOTAL		-12	+6				
PARS	(172)			(-21)	(+19)				

REGION 07 STATE 16 IOWA REP ORG 001 LAB 436001

-----------------PROBABILITY LIMITS-----------------

POL.CD.	AUDITS	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4	
		LOW	UP	LOW	UP	LOW	UP	LOW	UP
E42101 CO	12	-67	+32	-10	+12	-5	+5		
PARS	(6)	(+0)	(+6)			(+0)	(+0)		

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES .

(Continued)

TABLE 7. (Continued)

```
 REGION  07  STATE  16  IOWA                                  REP ORG  002  LAB  436002

                         ----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

 C42101 CO        6      -7      -7      -3      +7      -6     +10
    PARS      (   6)  ( -5) ( +2)   ( -4) ( +0)   ( -1) ( +1)

 S42602 NO2      10      -5      +3      -7     +10      -5      +8      -3      -1
    PARS      (   2)  ( -3) ( -3)   ( -3) ( -3)   ( -3) ( -3)

 REGION  07  STATE  17  KANSAS                                REP ORG  001  LAB  337001

                         ----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

 C42101 CO        6     -18     -11      -8      -3      -6      -3
    PARS      (  11)  ( +0) ( +3)   ( -4) ( +4)   ( -2) ( +2)

 REGION  07  STATE  26  MISSOURI                              REP ORG  001  LAB  338001

                         ----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

 C42101 CO       12      -3      +7      -9      +6      -4      +6
    PARS      (   2)  ( +0) (+27)   ( +3) (+18)   ( +3) ( +6)

 S11101 HIV      53     TOTAL            -5      +9
    PARS      (  12)                ( -6) ( +5)

 REGION  07  STATE  26  MISSOURI                              REP ORG  002  LAB  438004

                         ----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

 S11101 HIV       9     TOTAL           -15     +18
    PARS      (   9)                ( -8) ( +6)

 REGION  07  STATE  26  MISSOURI                              REP ORG  004  LAB  438002

                         ----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

 S11101 HIV      21     TOTAL           -14      +9
    PARS      (  12)                ( -8) (+10)

 REGION  07  STATE  26  MISSOURI                              REP ORG  005  LAB  438005

                         ----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS      LEVEL 1         LEVEL 2         LEVEL 3         LEVEL 4
                        LOW     UP      LOW     UP      LOW     UP      LOW     UP

 S11101 HIV      24     TOTAL            -1      +4
    PARS      (   3)                ( -2) ( +8)

    * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
 REGION  07  STATE  28  NEBRASKA                          REP ORG  001  LAB  335001

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

 311101 HIV      18      TOTAL         -12     +2
    PARS      (  19)                 (-14)  (+13)

 REGION  07  STATE  28  NEBRASKA                          REP ORG  002  LAB  435001

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

 311101 HIV       9      TOTAL          -2     +6
    PARS      (  12)                 ( -1)  ( +1)


                                   REGION AVERAGES

 REGION  07

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

 142101 CO       36      -36    +17     -9     +9      -6     +6
    PARS      (  25)   (-18)  (+21)  ( -6)  ( +9)   ( -3)  ( +4)

 142602 NO2      10       -5     +3     -7    +10      -5     +8      -3     -1
    PARS      (   2)   (-55)  (+49)  (-35)  (+29)   (-49)  (+43)

 311101 HIV     134      TOTAL          -9    +10
    PARS      (  67)                 (-12)  (+12)


 REGION  08  STATE  27  MONTANA                           REP ORG  003  LAB  439002

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

 311101 HIV      21      TOTAL         -26     -5
    PARS      (   2)                 ( -5)  ( -2)

 REGION  08  STATE  46  UTAH                              REP ORG  001  LAB  360001

                     -----------------PROBABILITY LIMITS-----------------

  POL.CD.     AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

 142101 CO       30       -6     +5     -3     +6      -3     +3
    PARS      (   2)   ( -7)  (+11)  ( -4)  ( +6)   ( -3)  ( +3)

 311101 HIV      27      TOTAL          -2     +7
    PARS      (  25)                 ( -3)  ( +3)

   * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

```
                                     REGION AVERAGES

  REGION  08

                          ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                         LOW    UP     LOW    UP     LOW    UP     LOW    UP

  C42101 CO      30       -6    +5     -3    +4     -3    +3
     PARS     (   2)   (-27) (+31)  (-15) (+17)  ( -8) ( +8)

  I11101 HIV     48      TOTAL         -25   +14
     PARS     (  27)                ( -6) ( +7)

  REGION  09  STATE  03  ARIZONA                        REP ORG  100  LAB  347001

                          ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                         LOW    UP     LOW    UP     LOW    UP     LOW    UP

  I11101 HIV      6      TOTAL          -5    +2
     PARS     (  19)                (-27) (-12)

  REGION  09  STATE  03  ARIZONA                        REP ORG  200  LAB  447001

                          ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                         LOW    UP     LOW    UP     LOW    UP     LOW    UP

  C42101 CO      45      -37    +3     -9    +1     -6    +1
     PARS     (  11)   (-22) ( +9)  ( -5) ( +2)  ( -4) ( +2)

  I11101 HIV     27      TOTAL         -12    -2
     PARS     (  29)                ( -8) ( +3)

  REGION  09  STATE  03  ARIZONA                        REP ORG  300  LAB  447002

                          ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                         LOW    UP     LOW    UP     LOW    UP     LOW    UP

  I11101 HIV     11      TOTAL          +9   +25
     PARS     (   2)                ( +6) ( +6)

  REGION  09  STATE  05  CALIFORNIA                     REP ORG  001  LAB  345002

                          ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                         LOW    UP     LOW    UP     LOW    UP     LOW    UP

  C42101 CO       9       -2    -2     -6    +0     -2    +3
     PARS     (  25)   ( -8) (+14)  ( -4) ( +9)  ( -5) ( +1)

  I11101 HIV      3      TOTAL          -6    +1
     PARS     (  54)                ( -9) ( +7)

  REGION  09  STATE  05  CALIFORNIA                     REP ORG  006  LAB  445001

                          ----------------PROBABILITY LIMITS----------------

  POL.CD.     AUDITS      LEVEL 1       LEVEL 2       LEVEL 3       LEVEL 4
                         LOW    UP     LOW    UP     LOW    UP     LOW    UP

  C42101 CO       6       -2    -2     -1    +0     -3    +3
     PARS     (  35)   ( -6) ( +9)  ( -2) ( +3)  ( -3) ( +4)

  * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

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   REGION  09  STATE  05  CALIFORNIA                       REP ORG  036  LAB  445003

                       ----------------PROBABILITY LIMITS----------------

   POL.CD.      AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                           LOW    UP        LOW    UP        LOW    UP        LOW    UP

   642101 CO       42       -10    +7       -20   +10        -17   +10
      PARS       (   6)   (-97) (+27)     ( -4) ( -1)      (-21) ( +5)      (-72) ( +7)

   REGION  09  STATE  05  CALIFORNIA                       REP ORG  061  LAB  445002

                       ----------------PROBABILITY LIMITS----------------

   POL.CD.      AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                           LOW    UP        LOW    UP        LOW    UP        LOW    UP

   311101 HIV       2       TOTAL            -2    -1
      PARS       (  30)                   (-12) (+11)

   REGION  09  STATE  12  HAWAII                           REP ORG  120  LAB  348001

                       ----------------PROBABILITY LIMITS----------------

   POL.CD.      AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                           LOW    UP        LOW    UP        LOW    UP        LOW    UP

   642101 CO       15       -84   +17        -7   +11         -8   +12
      PARS       (  26)   (-16) (+56)     ( -6) (+13)      (-17) (+14)

   342401 SO2       9        -6    +6        -4    +0         -2    +6          -1    -1
      PARS       (  61)   ( -2) ( +2)     ( -1) ( +1)      ( -1) ( +1)

   REGION  09  STATE  29  NEVADA                           REP ORG  200  LAB  446001

                       ----------------PROBABILITY LIMITS----------------

   POL.CD.      AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                           LOW    UP        LOW    UP        LOW    UP        LOW    UP

   642101 CO       21        -8    +3        -6    +0         -3    -1
      PARS       (   6)   ( -8) ( +3)     ( -1) ( +0)      ( -1) ( +0)

   311101 HIV      48       TOTAL           -10    +7
      PARS       (  22)                   ( -5) ( +5)

   REGION  09  STATE  29  NEVADA                           REP ORG  300  LAB  446002

                       ----------------PROBABILITY LIMITS----------------

   POL.CD.      AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                           LOW    UP        LOW    UP        LOW    UP        LOW    UP

   642101 CO       12        -9    -9        -5    +5         -2    +1
      PARS       (   6)   ( -5) ( +7)     (-43) (+34)      (-12) ( +6)

                                   REGION AVERAGES

   REGION  09*

                       ----------------PROBABILITY LIMITS----------------

   POL.CD.      AUDITS      LEVEL 1          LEVEL 2          LEVEL 3          LEVEL 4
                           LOW    UP        LOW    UP        LOW    UP        LOW    UP

   642101 CO      150       -15    +7       -13    +7        -10    +7
      PARS       ( 113)   (-24) (+34)     (-10) (+12)      ( -9) ( +7)      (-22) ( +7)

   342401 SO2       9        -6    +6        -4    +0         -2    +4          -1    -1
      PARS       (  61)   ( -2) ( +2)     ( -1) ( +1)      ( -1) ( +1)

   311101 HIV      97       TOTAL           -16   +14
      PARS       ( 156)                   (-19) (+13)

     * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
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(Continued)

TABLE 7. (Continued)

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 REGION  10  STATE  02  ALASKA                               REP ORG  020  LAB  351001

                      ----------------PROBABILITY LIMITS----------------

  POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

 311101 HIV       3      TOTAL           +6    +10
    PARS       (   3)                  ( -6) ( +8)

 REGION  10  STATE  38  OREGON                               REP ORG  001  LAB  353C01

                      ----------------PROBABILITY LIMITS----------------

  POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

 642101 CO       38      -2    +5       -2    +5       -1    +2
    PARS       (  22)  (-20) (+31)   ( -6) ( +9)   ( -6) ( +3)

 311101 HIV      39      TOTAL          -15    +9
    PARS       ( 144)                  ( -4) ( +3)

 REGION  10  STATE  49  WASHINGTON                           REP ORG  001  LAB  352001

                      ----------------PROBABILITY LIMITS----------------

  POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

 642101 CO        5      -5    -5       -1    +0       -2    -1
    PARS       (  60)  ( -6) ( +6)   ( -3) ( +3)   ( -3) ( +2)

 311101 HIV       3      TOTAL           -7    +2
    PARS       (  32)                  (-12) ( +8)

                                  REGION AVERAGES

 REGION  10

                      ----------------PROBABILITY LIMITS----------------

  POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

 642101 CO       43      -4    +6       -2    +5       -2    +2
    PARS       (  62)  (-14) (+18)   ( -5) ( +5)   ( -6) ( +3)

 311101 HIV      45      TOTAL          -15   +10
    PARS       ( 179)                  ( -6) ( +5)


                                 NATIONAL AVERAGES

                      ----------------PROBABILITY LIMITS----------------

  POL.CD.      AUDITS     LEVEL 1        LEVEL 2        LEVEL 3        LEVEL 4
                        LOW    UP      LOW    UP      LOW    UP      LOW    UP

 642101 CO     1118     -14   +10       -8    +6       -7    +7
    PARS       ( 666)  (-18) (+19)   ( -6) ( +9)   ( -8) ( +8)   (-30) (+15)

 342602 NO2     234     -29   +23      -12    +8      -13    +8      -11    +7
    PARS       ( 716)  ( -9) (+12)   ( -6) ( +7)   ( -5) ( +6)

 342401 SO2     157     -44   +28      -30   +20      -16   +10      -20   +12
    PARS       ( 640)  (-22) (+15)   (-17) (+13)   (-14) (+12)

 312128 LEAD     84     -25   +19      -15   +11      -15   +10
    PARS       ( 535)  (-12) ( +6)   ( -7) ( +5)

 311101 HIV    2116      TOTAL          -18   +19
    PARS       (3073)                  (-10) (+10)

      * ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES
```

(Continued)

TABLE 7. (Continued)

REGIONAL SUMMARY

POL.CD. 42101 CARBON MONOXIDE

REGION	AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
01	48	-6	+6	-16	+19	-19	+15		
PARS	(20)	(-7)	(+9)	(-4)	(+6)	(-5)	(+7)		
02	111	-1	+5	-3	+5	-2	+4		
PARS	(33)	(-12)	(+9)	(-6)	(+5)	(-6)	(+5)		
03	143	-6	+8	-6	+7	-5	+5		
PARS	(61)	(-13)	(+10)	(-9)	(+8)	(-5)	(+5)		
04	305	-11	+9	-5	+6	-5	+5		
PARS	(250)	(-16)	(+11)	(-7)	(+7)	(-7)	(+6)		
05	207	-19	+10	-8	+8	-7	+7		
PARS	(50)	(-16)	(+14)	(-11)	(+10)	(-11)	(+8)		
06	45	-7	+5	-18	+12	-16	+13		
PARS	(50)	(-21)	(+26)	(-11)	(+13)	(-16)	(+21)		
07	36	-36	+17	-9	+9	-6	+6		
PARS	(25)	(-88)	(+21)	(-8)	(+9)	(-3)	(+4)		
08	30	-6	+5	-3	+6	-3	+3		
PARS	(2)	(-27)	(+31)	(-15)	(+17)	(-8)	(+8)		
09	150	-15	+7	-13	+7	-10	+7		
PARS	(113)	(-26)	(+34)	(-10)	(+12)	(-9)	(+7)	(-22)	(+7)
10	43	-4	+6	-2	+5	-2	+2		
PARS	(62)	(-16)	(+18)	(-5)	(+5)	(-6)	(+3)		

REGIONAL SUMMARY

POL.CD. 42602 NITROGEN DIOXIDE

REGION	AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
03	10	-10	+13	-9	+14	+1	+4	+0	+4
PARS	(32)	(-6)	(+8)	(-5)	(+3)	(-4)	(+3)		
04	149	-37	+26	-13	+5	-15	+6	-13	+6
PARS	(424)	(-9)	(+10)	(-6)	(+7)	(-6)	(+6)		
05	30	-7	+3	-7	+2	-5	+3	-4	+0
PARS	(174)	(-9)	(+17)	(-4)	(+8)	(-2)	(+5)		
06	35	-8	+15	-7	+16	-5	+11	-3	+8
PARS	(84)	(-7)	(+9)	(-5)	(+6)	(-6)	(+6)		
07	10	-5	+3	-7	+10	-5	+8	-3	-1
PARS	(2)	(-55)	(+49)	(-35)	(+29)	(-49)	(+43)		

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

(Continued)

TABLE 7. (Continued)

REGIONAL SUMMARY

POL.CD. 42401 SULFUR DIOXIDE

REGION	AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
		---PROBABILITY LIMITS---							
04	108	-32	+33	-35	+24	-18	+10	-20	+13
PARS	(358)	(-26)	(+15)	(-21)	(+15)	(-18)	(+14)		
05	27	-21	+12	-14	+3	-14	+11	-24	+8
PARS	(185)	(-15)	(+11)	(-9)	(+7)	(-6)	(+5)		
06	13	-28	+13	-19	+10	-16	+6	-10	+8
PARS	(36)	(-25)	(+13)	(-14)	(+13)	(-10)	(+10)		
09	9	-6	+6	-4	+0	-2	+4	-1	-1
PARS	(81)	(-2)	(+2)	(-1)	(+1)	(-1)	(+1)		

REGIONAL SUMMARY

POL.CD. 12128 LEAD

REGION	AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
		---PROBABILITY LIMITS---							
01	12	-14	+3	-10	+0	-12	+3		
PARS	(26)	(-11)	(+3)	(-9)	(+0)				
03	12	-30	-1	-15	-10	-18	-10		
PARS	(3)	(-5)	(+5)	(-4)	(+1)				
04	60	-21	+22	-10	+12	-7	+8		
PARS	(506)	(-11)	(+6)	(-5)	(+4)				

REGIONAL SUMMARY

POL.CD. 11101 HI VOLATILE

REGION	AUDITS	LEVEL 1 LOW	LEVEL 1 UP	LEVEL 2 LOW	LEVEL 2 UP	LEVEL 3 LOW	LEVEL 3 UP	LEVEL 4 LOW	LEVEL 4 UP
		---PROBABILITY LIMITS---							
01	109	TOTAL		-8	+7				
PARS	(264)			(-9)	(+4)				
02	57	TOTAL		-25	+37				
PARS	(38)			(-7)	(+6)				
03	351	TOTAL		-23	+32				
PARS	(345)			(-7)	(+9)				
04	454	TOTAL		-16	+16				
PARS	(1405)			(-6)	(+9)				
05	663	TOTAL		-15	+16				
PARS	(420)			(-7)	(+9)				
06	156	TOTAL		-12	+6				
PARS	(172)			(-21)	(+19)				
07	134	TOTAL		-9	+10				
PARS	(67)			(-12)	(+12)				
08	48	TOTAL		-25	+14				
PARS	(27)			(-8)	(+7)				
09	97	TOTAL		-16	+14				
PARS	(156)			(-19)	(+13)				
10	45	TOTAL		-15	+10				
PARS	(179)			(-6)	(+5)				

* ZERO PROBABILITY LIMITS ARE INCLUDED IN THE CALCULATION OF THE AVERAGES

TABLE 8. FREQUENCY DISTRIBUTION OF PROBABILITY LIMITS

ENVIRONMENTAL PROTECTION AGENCY
EMSL PRECISION/ACCURACY REPORTING SYSTEM
FREQUENCY DISTRIBUTION OF PROBABILITY LIMITS
DATA SELECTED FOR THE YEAR 1981
REPORT PA25Q001
PROGRAM PA250
NATIONAL FREQUENCY SUMMARY
AUTOMATED ANALYZERS

POLLUTANT LEVEL	NUMBER OF REP.ORG.-QTR	LOWER PROBABILITY LIMIT MIN	10%	20%	30%	40%	50%	60%	70%	80%	90%	MAX	MEAN	STD DEV	UPPER PROBABILITY LIMIT MIN	10%	20%	30%	40%	50%	60%	70%	80%	90%	MAX	MEAN	STD DEV
42401 - SO2																											
PRECISION	342	-79	-25	-20	-16	-14	-13	-12	-10	-06	-06	+05	-15	9.2	-08	+02	+04	+06	+07	+08	+09	+11	+14	+17	+85	+09	7.6
ACC-LVL 1	220	-86	-33	-26	-22	-17	-16	-12	-16	-07	-03	+09	-17	13.2	-16	+01	+04	+06	+09	+10	+13	+15	+19	+30	+99	+13	13.8
ACC-LVL 2	228	-75	-30	-20	-16	-13	-11	-09	-07	-04	-02	+20	-13	11.7	-08	-00	+03	+05	+07	+10	+12	+14	+17	+22	+99	+11	12.8
ACC-LVL 3	220	-87	-29	-20	-14	-13	-11	-09	-02	-04	-01	+14	-13	12.1	-08	+02	+04	+06	+08	+10	+11	+13	+16	+23	+99	+11	10.7
ACC-LVL 4	18	-23	-16	-15	-13	-09	-07	-07	-03	-02	-01	-00	-09	6.8	-06	-01	-01	-00	+03	+04	+05	+06	+14	+17	+26	+06	7.5
44201 - O3																											
PRECISION	377	-81	-21	-16	-14	-12	-16	-09	-07	-06	-03	+07	-12	8.9	-16	+02	+04	+06	+08	+09	+10	+12	+14	+17	+93	+10	9.1
ACC-LVL 1	265	-55	-29	-22	-18	-15	-12	-10	-08	-05	-02	+09	-14	10.8	-33	-00	+04	+06	+09	+10	+13	+15	+20	+24	+97	+12	12.3
ACC-LVL 2	263	-63	-19	-16	-13	-11	-09	-18	-06	-04	-01	+08	-10	8.0	-07	+01	+03	+05	+06	+07	+08	+11	+13	+16	+82	+09	8.9
ACC-LVL 3	265	-43	-19	-16	-12	-10	-08	-07	-06	-04	-02	+08	-10	7.3	-06	+01	+03	+04	+06	+07	+09	+11	+13	+18	+71	+09	8.5
ACC-LVL 4	32	-24	-13	-12	-10	-10	-08	-06	-06	-05	-02	-06	-09	4.9	-03	-00	+02	+03	+03	+05	+07	+07	+09	+11	+23	+06	5.3
42101 - CO																											
PRECISION	296	-63	-16	-14	-11	-10	-08	-07	-06	-05	-03	+13	-10	7.4	-08	+01	+02	+04	+05	+06	+08	+10	+12	+17	+49	+08	7.7
ACC-LVL 1	194	-99	-27	-20	-15	-12	-10	-08	-06	-04	-00	+14	-13	13.0	-08	-00	+04	+06	+07	+09	+11	+14	+20	+26	+89	+12	13.6
ACC-LVL 2	197	-52	-16	-11	-08	-06	-06	-05	-03	-02	-00	+09	-07	8.6	-05	-00	+02	+03	+04	+06	+08	+09	+12	+16	+57	+08	8.2
ACC-LVL 3	199	-86	-14	-10	-08	-06	-05	-04	-03	-02	-01	+06	-07	8.9	-08	-00	+01	+02	+03	+04	+05	+07	+08	+13	+77	+06	7.7
ACC-LVL 4	8	-33	-33	-16	-08	-08	-05	-05	-02	-01	-00	-00	-09	10.9	-06	-06	-03	-00	+02	+05	+05	+07	+11	+12	+12	+04	6.4
42602 - NO2																											
PRECISION	177	-74	-23	-19	-16	-14	-12	-11	-09	-02	-04	+06	-14	10.2	-11	+03	+05	+07	+08	+10	+12	+14	+16	+23	+71	+11	9.2
ACC-LVL 1	90	-99	-48	-35	-28	-19	-14	-10	-08	-05	+01	+13	-21	21.9	-23	+03	+06	+09	+12	+15	+21	+30	+41	+87	+99	+26	20.3
ACC-LVL 2	92	-61	-27	-21	-15	-12	-11	-07	-05	-02	-04	+16	-12	12.8	-22	-01	+01	+04	+08	+11	+13	+18	+21	+27	+42	+11	11.8
ACC-LVL 3	89	-51	-26	-17	-12	-09	-06	-07	-04	-03	-02	+09	-10	10.1	-18	-02	+01	+03	+06	+06	+08	+12	+15	+22	+46	+08	10.1
ACC-LVL 4	5	-04	-04	-04	-04	-01	-01	-00	-00	+02	+02	+02	-01	2.6	-01	-01	+02	+02	+03	+03	+04	+04	+08	+08	+28	+03	3.3

(Continued)

Table 8. (Continued)

ENVIRONMENTAL PROTECTION AGENCY
EMSL PRECISION/ACCURACY REPORTING SYSTEM
FREQUENCY DISTRIBUTION OF PROBABILITY LIMITS
REPORT PA250R01
PROGRAM PA250
DATA SELECTED FOR THE YEAR 1981
NATIONAL FREQUENCY SUMMARY

MANUAL METHODS

POLLUTANT	NUMBER OF	LOWER PROBABILITY LIMIT												STD	UPPER PROBABILITY LIMIT												STD
LEVEL	RPT.ORG.-QTR	MIN	10%	20%	30%	40%	50%	60%	70%	80%	90%	MAX	MEAN	DEV	MIN	10%	20%	30%	40%	50%	60%	70%	80%	90%	MAX	MEAN	DEV
11101 - TSP																											
PRECISION	526	-99	-25	-19	-15	-12	-10	-08	-07	-05	-03	+32	-13	11.2	-13	+03	+05	+07	+09	+10	+13	+15	+19	+26	+99	+13	12.6
ACC-LVL 2	444	-41	-12	-09	-08	-07	-06	-05	-04	-02	-01	+29	-06	5.6	-13	+01	+03	+04	+05	+06	+07	+09	+11	+14	+98	+07	6.2
12128 - PB																											
PRECISION	30	-99	-45	-34	-25	-21	-18	-16	-11	-07	-03	+07	-25	23.8	+04	+07	+13	+16	+18	+22	+25	+30	+38	+92	+99	+30	26.7
ACC-LVL 1	22	-48	-22	-22	-15	-14	-10	-07	-04	-03	-00	+03	-12	11.3	-01	+01	+02	+04	+06	+07	+08	+09	+11	+16	+38	+08	7.8
ACC-LVL 2	25	-49	-15	-13	-13	-09	-05	-03	-03	-01	-00	+02	-09	10.4	-03	-01	+01	+01	+02	+02	+03	+04	+04	+07	+11	+02	3.1
ACC-LVL 3	14	-37	-37	-18	-12	-08	-08	-07	-06	-06	-04	-01	-12	11.3	-01	-00	-00	+02	+02	+03	+04	+05	+09	+12	+13	+04	4.7
42401 - SO2																											
PRECISION	48	-99	-99	-99	-84	-65	-42	-30	-25	-18	-10	+99	-51	41.6	-10	-00	+11	+23	+30	+73	+99	+99	+99	+99	+99	+57	41.5
ACC-LVL 1	65	-84	-32	-27	-19	-16	-12	-08	-08	-06	-03	+02	-16	15.0	-27	-03	+02	+03	+05	+07	+08	+13	+16	+23	+99	+09	15.3
ACC-LVL 2	65	-53	-26	-14	-11	-09	-07	-07	-06	-04	-01	+06	-09	8.6	-27	+01	+02	+03	+05	+06	+08	+10	+12	+17	+26	+07	7.4
ACC-LVL 3	64	-51	-16	-13	-09	-07	-06	-06	-02	-02	-01	+10	-08	9.1	-25	+01	+02	+03	+04	+05	+07	+08	+10	+13	+46	+06	8.3
42602 - NO2																											
PRECISION	55	-99	-94	-68	-45	-37	-31	-25	-22	-15	-11	-07	-41	30.1	-05	+05	+10	+16	+22	+31	+44	+65	+99	+99	+99	+44	36.6
ACC-LVL 1	75	-40	-14	-10	-09	-07	-06	-06	-03	-02	-01	+06	-07	6.4	-03	+02	+04	+05	+07	+08	+10	+12	+15	+19	+44	+10	7.8
ACC-LVL 2	75	-27	-08	-07	-06	-04	-03	-02	-02	-01	+01	+05	-04	4.3	-02	+02	+03	+03	+04	+06	+06	+07	+08	+10	+19	+06	3.5
ACC-LVL 3	74	-16	-11	-07	-05	-04	-03	-02	-02	-01	-00	+06	-04	4.4	-03	+01	+02	+03	+05	+06	+06	+07	+08	+10	+26	+05	4.4

TABLE 9. NATIONAL FREQUENCY DISTRIBUTION OF MEAN AND STANDARD DEVIATION OF THE PROBABILITY LIMITS

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ENVIRONMENTAL PROTECTION AGENCY              EMSL PRECISION/ACCURACY REPORTING SYSTEM

                         NATIONAL FREQUENCY DISTRIBUTION OF MEAN AND STANDARD DEVIATION OF THE PROBABILITY LIMITS
PROGRAM PA280                                          DATA SELECTED FOR THE YEAR 1981                                  REPORT PA280R01

                                                           AUTOMATED ANALYZERS

POLLUTANT      NUMBER OF  ------------ MEAN OF PROBABILITY LIMITS -------------STD  ----------- STD-DEV OF PROBABILITY LIMITS ---------STD
      LEVEL    REP-ORG-QTR MIN 10% 20% 30% 40% 50% 60% 70% 80% 90% MAX MEAN DEV   MIN 10% 20% 30% 40% 50% 60% 70% 80% 90% MAX MEAN DEV

42401 - SO2
    PRECISION     342      -32 -04 -06 -05 -03 -02 -02 -01 +01 +02 +17 -03  5.2   0.0 3.1 3.8 4.3 4.8 5.4 6.1 6.6 7.6 9.9 35. 6.1  3.4
    ACC-LVL 1     220      -25 -10 -07 -05 -04 -02 -01 +01 +03 +06 +26 -02  6.9   0.0 2.0 3.3 4.6 5.4 5.9 7.1 8.9 11. 15. 46. 7.5  5.7
    ACC-LVL 2     228      -20 -09 -05 -04 -02 -01 +01 +01 +03 +06 +25 -01  6.2   0.0 1.3 2.3 3.3 4.1 4.8 5.9 7.1 8.7 12. 46. 6.1  5.6
    ACC-LVL 3     220      -25 -09 -03 -04 -02 -01 +00 +02 +04 +07 +25 -01  6.1   0.3 1.5 2.5 3.6 4.1 4.8 5.6 6.9 8.7 12. 38. 6.1  4.9
    ACC-LVL 4      16      -08 -07 -05 -04 -02 -01 +00 +00 +02 +03 +04 -02  3.3   0.0 0.0 0.5 1.5 2.8 3.3 3.6 4.8 5.6 8.7 12. 3.9  3.2

44201 - O3
    PRECISION     377      -23 -06 -04 -02 -02 -01 +00 +01 +02 +03 +34 -01  4.5   0.0 2.3 3.1 3.6 4.1 4.8 5.6 6.6 7.1 8.9 42. 5.3  4.8
    ACC-LVL 1     265      -33 -09 -06 -04 -02 -01 +00 +02 +03 +05 +30 -01  6.2   0.0 1.5 2.8 3.6 4.8 5.9 6.9 8.2 9.9 12. 35. 6.7  5.0
    ACC-LVL 2     263      -30 -05 -04 -03 -02 -01 +00 +01 +03 +04 +21 -01  4.6   0.0 1.0 2.0 2.8 3.6 4.1 4.8 6.1 7.6 8.9 31. 4.9  3.6
    ACC-LVL 3     265      -12 -05 -04 -03 -02 -01 +00 +01 +02 +04 +19 -01  3.9   0.0 1.0 2.0 2.6 3.3 3.8 4.6 6.1 6.9 8.9 27. 4.7  3.3
    ACC-LVL 4      32      -08 -05 -04 -03 -03 -02 -02 +00 +01 +02 +06 -01  2.9   0.0 1.5 1.8 2.3 2.8 3.3 4.1 4.3 4.8 6.6 8.9 3.6  2.1

42101 - CO
    PRECISION     296      -18 -08 -04 -03 -02 -01 +00 +01 +02 +04 +19 -01  4.1   0.0 1.8 2.5 2.8 3.1 3.6 4.1 5.1 5.9 8.4 29. 4.5  3.2
    ACC-LVL 1     196      -35 -06 -05 -03 -01 +00 +01 +02 +04 +07 +34 -00  7.5   0.0 1.0 2.5 3.3 4.3 5.1 5.9 7.1 9.7 12. 33. 6.5  5.8
    ACC-LVL 2     197      -17 -05 -03 -02 -01 +00 +01 +01 +03 +05 +17 +00  4.1   0.0 0.8 1.3 1.8 2.0 2.8 3.6 4.3 5.1 8.4 22. 3.8  3.7
    ACC-LVL 3     199      -13 -05 -03 -02 -01 -01 +00 +01 +01 +03 +11 -01  3.2   0.0 0.5 1.0 1.3 1.8 2.0 2.5 3.6 4.3 6.9 42. 3.2  3.9
    ACC-LVL 4       8      -11 -11 -07 -04 -02 -02 -02 +00 +01 +03 +03 -03  4.4   0.0 0.0 0.5 0.5 0.8 2.3 2.3 3.3 7.1 11. 11. 3.2  4.0

42602 - NO2
    PRECISION     177      -21 -07 -04 -03 -02 -01 +00 +01 +02 +05 +12 -01  4.9   0.0 2.5 3.3 4.1 4.8 5.6 6.6 7.6 8.7 11. 37. 6.5  4.5
    ACC-LVL 1      90      -29 -14 -07 -06 +00 +01 +03 +07 +13 +23 +52 +02 14.2   0.0 2.8 3.8 4.6 6.1 8.4 10. 14. 18. 38. 50. 12. 11.8
    ACC-LVL 2      92      -28 -09 -06 -04 -02 -01 +01 +03 +05 +08 +23 -00  7.6   0.0 1.0 1.5 2.3 3.6 4.8 6.6 8.2 9.7 12. 25. 5.9  4.9
    ACC-LVL 3      89      -25 -08 -06 -04 -03 -02 +00 +01 +03 +07 +22 -01  6.4   0.0 0.8 1.3 2.0 2.8 3.6 5.1 5.9 8.2 9.7 20. 4.8  4.8
    ACC-LVL 4       5      -03 -03 -01 -01 +01 +01 +02 +02 +03 +05 +05 +01  2.9   0.0 0.0 1.0 1.0 1.0 1.0 1.5 1.5 1.5 1.5 1.5 1.2  0.5
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(Continued)

TABLE 9 (Continued)

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ENVIRONMENTAL PROTECTION AGENCY              EMSL PRECISION/ACCURACY REPORTING SYSTEM

                              NATIONAL FREQUENCY DISTRIBUTION OF MEAN AND STANDARD DEVIATION OF THE PROBABILITY LIMITS
PROGRAM PA280                                      DATA SELECTED FOR THE YEAR 1981                                    REPORT PA280R01

                                                        MANUAL METHODS

POLLUTANT      NUMBER OF   ----------- MEAN OF PROBABILITY LIMITS -----------STD   ---------- STD-DEV OF PROBABILITY LIMITS ---------STD
      LEVEL  REP.ORG.-QTR MIN 10% 20% 30% 40% 50% 60% 70% 80% 90% MAX MEAN DEV   MIN 10% 20% 30% 40% 50% 60% 70% 80% 90% MAX MEAN DEV

11101 - TSP
    PRECISION      526     -23 -06 -04 -02 -01 +00 +01 +03 +04 +06 +35 +00  5.5   0.0 3.6 4.7 5.6 6.1 7.2 8.3 10. 13. 17. 71. 8.3  7.6
    ACC-LVL 2      466     -21 -04 -02 -01 -01 +00 +01 +02 +03 +05 +36 +00  3.8   0.0 1.3 1.5 2.0 2.5 2.8 3.3 4.1 4.8 6.1 18. 3.4  2.3

12128 - Pb
    PRECISION       36     -06 -04 -02 -01 -01 +00 +03 +04 +06 +18 +26 +03  7.8   3.0 5.8 8.3 9.7 12. 14. 16. 22. 27. 49. 71. 20.  17.4
    ACC-LVL 1       22     -09 -06 -08 -06 -06 -01 +00 +01 +03 +05 +07 -02  5.0   0.5 2.0 2.0 2.5 2.5 4.3 4.8 7.1 7.6 7.4 20. 4.9  4.1
    ACC-LVL 2       25     -24 -08 -06 -06 -03 -02 -01 -01 +01 +02 +06 -03  5.6   0.0 0.5 1.0 1.3 1.5 1.8 3.6 3.8 4.8 4.8 11. 2.8  2.8
    ACC-LVL 3       14     -17 -11 -07 -06 -05 -03 -02 -02 +01 +02 +04 -06  5.4   1.8 1.8 1.8 2.5 2.8 3.3 3.8 3.8 5.6 10. 13. 4.2  3.4

42401 - SO2
    PRECISION       66     -26 -14 -06 -02 +00 +00 +00 +01 +06 +17 +99 +03 17.3   0.0 3.0 11. 18. 19. 37. 56. 65. 71. 71. 71. 39.  27.1
    ACC-LVL 1       65     -45 -13 -09 -05 -04 -02 -01 +01 +03 +06 +18 -03  9.6   0.0 1.5 2.8 3.3 4.1 5.1 6.6 7.9 9.6 12. 41. 6.5  6.0
    ACC-LVL 2       65     -40 -06 -04 -03 -02 -01 +00 +01 +03 +05 +13 -01  6.6   0.3 1.3 2.0 2.8 3.6 [illegible] [illegible] [illegible] [illegible] [illegible] 10. 4.2  2.5
    ACC-LVL 3       64     -38 -05 -04 -01 +00 +00 +01 +01 +02 +04 +12 -01  5.9   0.3 0.5 1.3 2.0 2.3 3.1 3.6 4.1 5.1 6.9 21. 3.6  3.2

42602 - NO2
    PRECISION       55     -18 -11 -04 -02 -01 +00 +01 +02 +05 +16 +34 +01 10.1   4.7 7.2 10. 13. 16. 22. 28. 47. 68. 71. 71. 31.  23.1
    ACC-LVL 1       75     -06 -02 -01 +00 +01 +01 +02 +03 +05 +06 +11 +02  3.3   0.0 1.3 2.0 2.5 3.1 3.6 4.1 5.1 5.9 8.2 21. 4.2  3.2
    ACC-LVL 2       75     -07 -02 -01 +00 +00 +01 +01 +02 +03 +04 +08 +01  2.3   0.0 0.8 1.3 1.3 1.8 2.0 2.5 3.1 3.6 4.1 10. 2.5  1.8
    ACC-LVL 3       74     -06 -03 -02 -01 +00 +01 +01 +02 +03 +04 +08 +01  2.5   0.0 0.8 1.0 1.3 1.5 2.0 2.3 2.8 3.3 4.3 9.4 2.4  1.9
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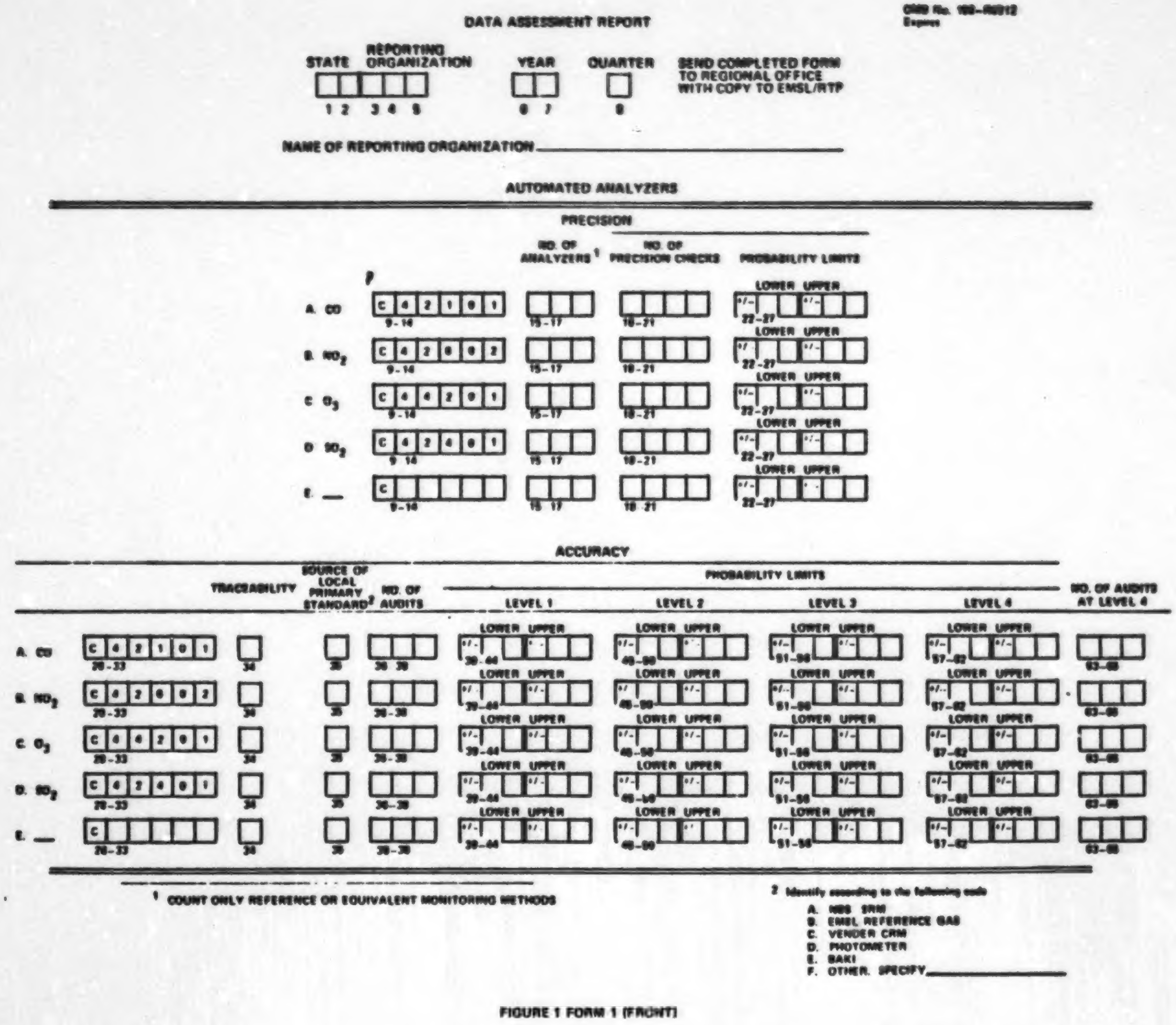
2. S. M. Bromberg, R. L. Lampe, and B. I. Bennett, "Summary of Audit Performance Measurement of SO_2, NO_2, CO, Sulfate, Nitrate, Lead, Hi-vol Flow Rate - 1978," EPA-600/4-80-017, June 1980.

3. Raymond C. Rhodes, Berne I. Bennett, John C. Puzak, "EPA's National Performance Audit Program for Ambient Air Pollution Measurements," Presentation 75th Annual Meeting of the Air Pollution Control Association, June 1982.

4. Federal Register, "Ambient Air Quality Monitoring, Data Reporting, and Surveillance Provision," 40 CFR Part 58, (44 FR 27558-27604).



DATA ASSESSMENT REPORT

OMB No. 158-R0012
Expires

STATE	REPORTING ORGANIZATION	YEAR	QUARTER
☐☐ 1 2	☐☐☐ 3 4 5	☐☐ 6 7	☐ 8

SEND COMPLETED FORM TO REGIONAL OFFICE WITH COPY TO EMSL/RTP

NAME OF REPORTING ORGANIZATION ____________________

AUTOMATED ANALYZERS

PRECISION

		NO. OF ANALYZERS[1]	NO. OF PRECISION CHECKS	PROBABILITY LIMITS LOWER	PROBABILITY LIMITS UPPER
A. CO	C 4 2 1 0 1 (9-14)	☐☐☐ (15-17)	☐☐☐☐ (18-21)	+/- ☐ (22-27)	+/- ☐☐
B. NO_2	C 4 2 6 0 2 (9-14)	☐☐☐ (15-17)	☐☐☐☐ (18-21)	+/- ☐ (22-27)	+/- ☐☐
C. O_3	C 4 4 2 0 1 (9-14)	☐☐☐ (15-17)	☐☐☐☐ (18-21)	+/- ☐ (22-27)	+/- ☐☐
D. SO_2	C 4 2 4 0 1 (9-14)	☐☐☐ (15-17)	☐☐☐☐ (18-21)	+/- ☐ (22-27)	+/- ☐☐
E. ___	C ☐☐☐☐☐ (9-14)	☐☐☐ (15-17)	☐☐☐☐ (18-21)	+/- ☐ (22-27)	+/- ☐☐

ACCURACY

		TRACEABILITY	SOURCE OF LOCAL PRIMARY STANDARD[2]	NO. OF AUDITS	PROBABILITY LIMITS LEVEL 1 LOWER	LEVEL 1 UPPER	LEVEL 2 LOWER	LEVEL 2 UPPER	LEVEL 3 LOWER	LEVEL 3 UPPER	LEVEL 4 LOWER	LEVEL 4 UPPER	NO. OF AUDITS AT LEVEL 4
A. CO	C 4 2 1 0 1 (28-33)	☐ (34)	☐ (35)	☐☐☐ (36-38)	+/- ☐ (39-44)	+/- ☐☐	+/- ☐ (45-50)	+/- ☐☐	+/- ☐ (51-56)	+/- ☐☐	+/- ☐ (57-62)	+/- ☐☐	☐☐☐ (63-65)
B. NO_2	C 4 2 6 0 2 (28-33)	☐ (34)	☐ (35)	☐☐☐ (36-38)	+/- ☐ (39-44)	+/- ☐☐	+/- ☐ (45-50)	+/- ☐☐	+/- ☐ (51-56)	+/- ☐☐	+/- ☐ (57-62)	+/- ☐☐	☐☐☐ (63-65)
C. O_3	C 4 4 2 0 1 (28-33)	☐ (34)	☐ (35)	☐☐☐ (36-38)	+/- ☐ (39-44)	+/- ☐☐	+/- ☐ (45-50)	+/- ☐☐	+/- ☐ (51-56)	+/- ☐☐	+/- ☐ (57-62)	+/- ☐☐	☐☐☐ (63-65)
D. SO_2	C 4 2 4 0 1 (28-33)	☐ (34)	☐ (35)	☐☐☐ (36-38)	+/- ☐ (39-44)	+/- ☐☐	+/- ☐ (45-50)	+/- ☐☐	+/- ☐ (51-56)	+/- ☐☐	+/- ☐ (57-62)	+/- ☐☐	☐☐☐ (63-65)
E. ___	C ☐☐☐☐☐ (28-33)	☐ (34)	☐ (35)	☐☐☐ (36-38)	+/- ☐ (39-44)	+/- ☐☐	+/- ☐ (45-50)	+/- ☐☐	+/- ☐ (51-56)	+/- ☐☐	+/- ☐ (57-62)	+/- ☐☐	☐☐☐ (63-65)

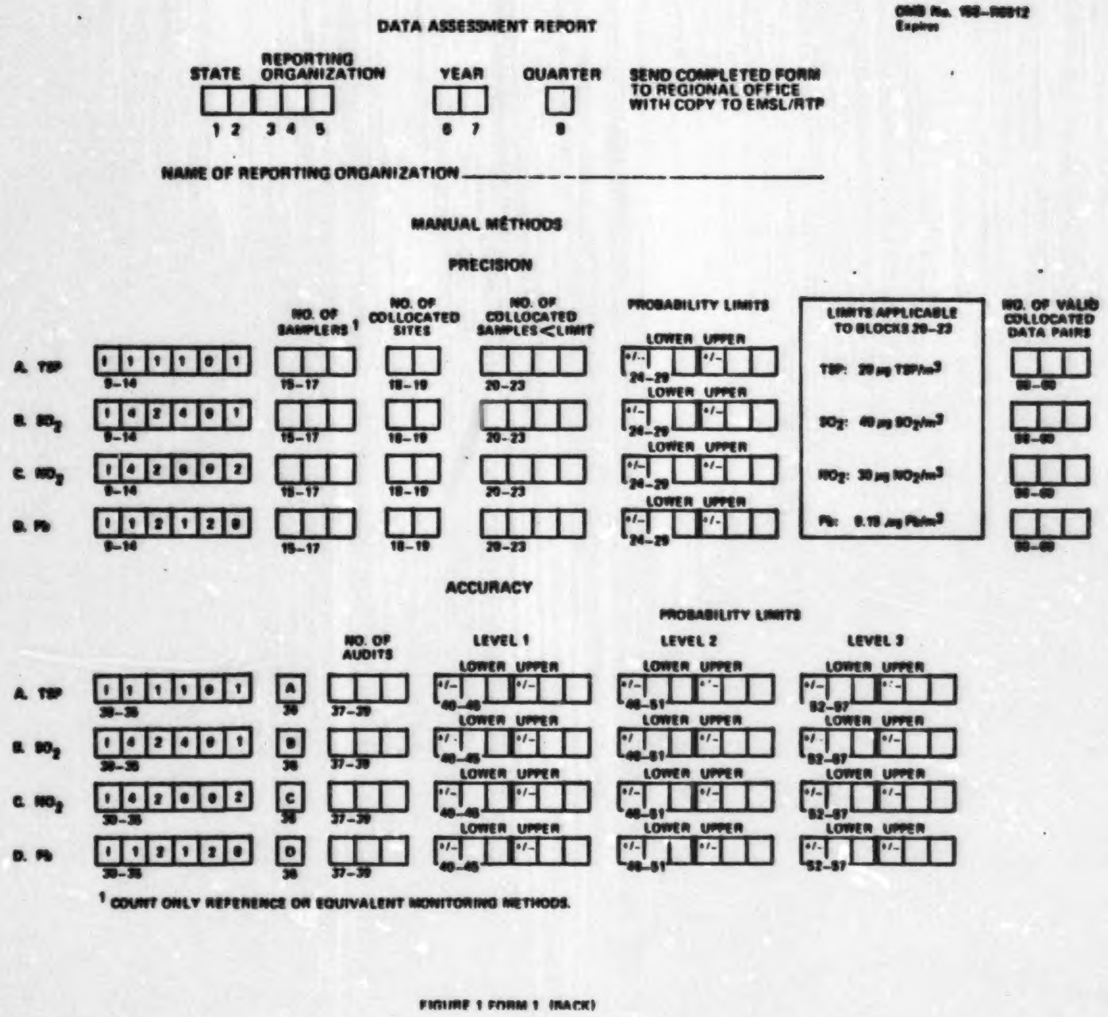
[1] COUNT ONLY REFERENCE OR EQUIVALENT MONITORING METHODS

[2] Identify according to the following code
A. NBS SRM
B. EMSL REFERENCE GAS
C. VENDER CRM
D. PHOTOMETER
E. BAKI
F. OTHER. SPECIFY____________

FIGURE 1 FORM 1 (FRONT)

(Continued)

Figure A-1. Sample report form.



OMB No. 158-R0012
Expires

DATA ASSESSMENT REPORT

STATE	REPORTING ORGANIZATION	YEAR	QUARTER	
☐☐	☐☐☐	☐☐	☐	SEND COMPLETED FORM TO REGIONAL OFFICE WITH COPY TO EMSL/RTP
1 2	3 4 5	6 7	8	

NAME OF REPORTING ORGANIZATION ______________________________

MANUAL METHODS

PRECISION

		NO. OF SAMPLERS [1]	NO. OF COLLOCATED SITES	NO. OF COLLOCATED SAMPLES < LIMIT	PROBABILITY LIMITS LOWER	PROBABILITY LIMITS UPPER	LIMITS APPLICABLE TO BLOCKS 20–23	NO. OF VALID COLLOCATED DATA PAIRS
A. TSP	1 1 1 1 0 1 9–14	☐☐☐ 15–17	☐☐ 18–19	☐☐☐☐ 20–23	+/– ☐☐ 24–29	+/– ☐☐	TSP: 20 µg TSP/m³	☐☐☐ 30–32
B. SO_2	1 4 2 4 0 1 9–14	☐☐☐ 15–17	☐☐ 18–19	☐☐☐☐ 20–23	+/– ☐☐ 24–29	+/– ☐☐	SO_2: 40 µg SO_2/m^3	☐☐☐ 30–32
C. NO_2	1 4 2 6 0 2 9–14	☐☐☐ 15–17	☐☐ 18–19	☐☐☐☐ 20–23	+/– ☐☐ 24–29	+/– ☐☐	NO_2: 30 µg NO_2/m^3	☐☐☐ 30–32
D. Pb	1 1 2 1 2 8 9–14	☐☐☐ 15–17	☐☐ 18–19	☐☐☐☐ 20–23	+/– ☐☐ 24–29	+/– ☐☐	Pb: 0.15 µg Pb/m³	☐☐☐ 30–32

ACCURACY

			NO. OF AUDITS	PROBABILITY LIMITS LEVEL 1 LOWER	LEVEL 1 UPPER	LEVEL 2 LOWER	LEVEL 2 UPPER	LEVEL 3 LOWER	LEVEL 3 UPPER
A. TSP	1 1 1 1 0 1 30–35	A 36	☐☐☐ 37–39	+/– ☐☐ 40–45	+/– ☐☐	+/– ☐☐ 46–51	+/– ☐☐	+/– ☐☐ 52–57	+/– ☐☐
B. SO_2	1 4 2 4 0 1 30–35	B 36	☐☐☐ 37–39	+/– ☐☐ 40–45	+/– ☐☐	+/– ☐☐ 46–51	+/– ☐☐	+/– ☐☐ 52–57	+/– ☐☐
C. NO_2	1 4 2 6 0 2 30–35	C 36	☐☐☐ 37–39	+/– ☐☐ 40–45	+/– ☐☐	+/– ☐☐ 46–51	+/– ☐☐	+/– ☐☐ 52–57	+/– ☐☐
D. Pb	1 1 2 1 2 8 30–35	D 36	☐☐☐ 37–39	+/– ☐☐ 40–45	+/– ☐☐	+/– ☐☐ 46–51	+/– ☐☐	+/– ☐☐ 52–57	+/– ☐☐

[1] COUNT ONLY REFERENCE OR EQUIVALENT MONITORING METHODS.

FIGURE 1 FORM 1 (BACK)

Figure A-1 (Continued).

Block No.	Description
1-2	SAROAD State: The two digit SAROAD State code
3-5	REPORTING ORGANIZATION. A unique 3-digit code assigned by each State to each of its respective reporting organizations
6-7	YEAR: Last two digits of the calendar year
8	QUARTER: for SLAMS/NAMS Quarterly Report: Enter 1,2,3, or 4 to refer to calendar quarter the monitoring data and quality assessments were made

Automated Analyzers (Form 1. Front)

9-14 28-33	POLLUTANT IDENTIFIERS: Precoded. (Rows labeled "E" are available for future additional pollutants)
15-17	NUMBER OF ANALYZERS: Count only the number of approved analyzers in the network that report monitoring data for each pollutant.
18-21	NUMBER OF PRECISION CHECKS: Count the total number of precision checks included in the calculations reported.
22-24	LOWER PROBABILITY LIMIT, PRECISION: Block 22 is either "+" or "-". Blocks 22-24 contain the percentage (round off to a whole number) obtained from the lower probability limit equation.
25-27	UPPER PROBABILITY LIMIT, PRECISION: Block 25 is either "+" or "-". Blocks 26-27 contain the percentage obtained from upper probability limit equation. Note: If precision limits exceed two digits, e.g. 103% report as 99.
34-35	SOURCE OF AUDIT GAS: For accuracy determination, refer to code table, note 2, on the form.
36-38	NUMBER OF AUDITS: Report the total number of multipoint audits performed on the analyzers.
39-62	PROBABILITY LIMITS, ACCURACY: The lower and upper probability limits for each pollutant concentration level of the accuracy audits are entered in blocks 39-62. Levels, their corresponding concentration ranges for each pollutant and the appropriate blocks for this information are given in the following table.

Blocks	Levels	Pollutant Concentration Range, ppm	
		NO_2, O_3, SO_2	CO
39-44	1	.03 to .06	3 to 8
45-50	2	.15 to .20	15 to 20
51-56	3	.35 to .45	35 to 45
57-62	4	.80 to .90	80 to 90.

Block No.	Description
39-41,45-47, 51-53,57-59	LOWER PROBABILITY LIMITS, ACCURACY: Blocks 39,45,51, and 57 are either "+" or "-". Blocks 40-41, 46-47, 52-53 and 56-57 contain the percentages obtained from lower probability limits equation.
42-44,48-50, 54-56,60-62	UPPER PROBABILITY LIMIT, ACCURACY: Blocks 42,48,54 and 60 are either "+" or "-". Blocks 43-44,49-50,55-56 and 6162 contain the percentage obtained from upper probability limits equation. NOTE: If only one audit is performed during a given quarter for a given pollutant, it is not possible to calculate probability limits for that quarter. In that case, blocks 39-62 are left blank for the first such quarter and the number 001 is reported in blocks 3638. Probability limits are then computed and reported on a semi-annual basis (i.e., after the next quarter) from the audit data obtained during the two consecutive quarters.

Manual Methods (Form 1, Back)

9-14	POLLUTANT IDENTIFIERS: Precoded
30-35	(Rows labeled "D" are available for future additional pollutants.)
15-17	NUMBER OF SAMPLERS: Count only the number of samplers for each pollutant that is associated with an approved method and from which monitoring dat are reported as part of a SLAMS network.
18-19	NUMBER OF COLLOCATED SITES: Number of sites having collocated samplers. The minimum number is 2.
20-23	NUMBER OF COLLOCATED SAMPLES BELOW THE LIMIT: Count the number of samples from the collocated sites where the measurements from sampler reporting air quality for the site (see section 3.2.1) are below the following limits: TSP-20 µg TSP/m^3 SO_2-40 µg SO_2/m^3 NO_2-30 µg NO_3/m^3 Pb-0.15 µgPb/m^3
24-26	LOWER PROBABILITY LIMIT, PRECISION: Block 24 is either "+" or "-". Blocks 25-26 contain the percentage obtained from lower probability limit limit equation.
27-29	UPPER PROBABILITY LIMIT, PRECISION: Block 27 is either "+" or "-". Blocks 28-29 contain the percentage obtained from upper probability limit equation. NOTE: If precision limits exceed two digits, e.g., 103%, report as 99.
36	TYPE OF SAMPLER: Code from note 2 on the form. Codes A and B are intended for use with TSP to indicate whether or not samplers are equipped with automatic flow control. Code C is intended for use with SO_2 and NO_2 methods to indicate that flow control is accomplished with critical orifice.

Block No.	Description
37-39	**NUMBER OF AUDITS:** Count the total number of audits performed on the entire network for the pollutants. A single audit may consist of several audit level checks, but count only once for each audit. For example, although an audit conducted fo NO_2 or SO_2 consists of checks at three different concentration levels, count this as one audit, not three.
40-57	**PROBABILITY LIMITS, ACCURACY:** The lower and upper probability limits for each level of the accuracy audits are entered in blocks 40-57. Levels, their corresponding concentration ranges, and the appropriate blocks for this information are given in the following table:

Blocks	Levels	Audit Concentrations	
		TSP cfm	SO_2, NO_2 µg/ml
40-45	1	....	0.2 to 0.3
46-51	2	One within 40-60 cfm	0.5 to 0.6
52-57	3	....	0.8 to 0.9

40-42,46-48, 52-54	**LOWER PROBABILITY LIMITS, ACCURACY:** Blocks 40, 46 and 52 are either "+" or "-". Blocks 41-42, 47-48 and 53-54 contain the percentage obtained from lower probability limits equation.
43-45,49-51, 55-57	**UPPER PROBABILITY LIMITS, ACCURACY:** Blocks 43, 49 and 55 are either "+" or "-". Blocks 44-45, 50-51 and 56-57 contain the percentage obtained from upper probability limits equation. NOTE: If accuracy limits exceed two digits, e.g., 103%, report as 99. Report, as required, all pollutants (TSP, SO_2 and NO_2) as determined by manual sampling methods. Note that only blocks 48-51 are used for TSP. NOTE: If only one audit is performed during a given quarter for a given pollutant, it is not possible to calculate probability limits for that quarter. In that case, blocks 40-57 are left blank for the first such quarter and the number 001 is reported in blocks 37-39. Probability limits are then computed and reported on a semi-annual basis (i.e., after the next quarter) from the audit data obtained during the two consecutive quarters.